



DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No.

Project Name/Address:

Planner:

Minimum Comment Period:

Materials included in this Notice:

Blue Bulletin
Checklist
Vicinity Map
Plans
Other:

OTHERS TO RECEIVE THIS DOCUMENT:

State Department of Fish and Wildlife
State Department of Ecology, Shoreline Planner N.W. Region
Army Corps of Engineers
Attorney General
Muckleshoot Indian Tribe

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background [\[HELP\]](#)

1. **Name of proposed project, if applicable:** King County Metro Transit East Base NRV
Battery Infrastructure Project
2. **Name of applicant:** King County Metro Transit (Metro)

3. Address and phone number of applicant and contact person:

Lawrence Chung,
Transit Environmental Planner
(206) 263-5504
201 South Jackson St.,
MS KSC-TR-0431
Seattle, WA 98104-3856

4. Date checklist prepared: 11/04/2021

5. Agency requesting checklist: City of Bellevue

6. Proposed timing or schedule (including phasing, if applicable):

The project is approaching final design. Permits are being obtained and construction is expected to commence in the latter part of 2021 or at the beginning of 2022.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

There are no plans for future additions, expansion, or further activity related to or connected with this proposal.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- Critical Areas Report
- Geotechnical Report
- Washington State Department of Ecology (Ecology) Facility/Site Index

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

There are three applications pending governmental approval in and adjacent to East Base: 1) East Base Yard Lighting Replacement Project and Next Generation Wireless (NGW) Project, 2) Metro East Base - Pavement Replacement Project, and 3) 124th Avenue NE Corridor Project by City of Bellevue.

East Base Yard Lighting Replacement Project and Next Generation Wireless (NGW) Project

The goal of the East Base Yard Lighting Replacement Project (Lighting Project) is to improve lighting throughout the bus yard at East Base. The Lighting Project is needed to enhance worker safety and comply with Washington State Department of Labor and Industries (L&I) light level requirements because the current lighting is out of date with current standards. A total of seventeen (17) new, replacement, and existing light poles would be installed with new light-emitting diode (LED) lights to stay compliant with Washington Administrative Code [WAC] 296-800-210, which requires the bus yard to maintain an average of 3.0 foot-candle (fc) 30 inches above surface level with no single light measurement falling below 1.5 fc in the averaged area. There is also a related but separate project that replaced light fixtures and a substandard existing light pole in the interior of East Base, and construction completed in April of 2021.

The goal of the Next Generation Wireless (NGW) Project is to upgrade the current 4.9 GHz wireless network to a 5 GHz wireless network. Upon completion of the NGW Project, communication and data

integration of bus and operations office computer systems would be improved. The NGW Project would require installing fifteen (15) new Cisco wireless access points (APs) throughout the East Base.

Metro East Base - Pavement Replacement Project

The scope of work for this project includes pavement maintenance that removes and replaces 2,250 square feet of existing impervious area. The project involves removing the 14-inch-thick Hot Mix Asphalt area and replacing it with 10-inch-concrete pavement sections with reconstructed curbs and gutters. One 14-inch-diameter fir tree in the adjacent landscape area will be removed. Site elements affected by construction activities include, but are not limited to, asphalt and landscaped areas. Existing utility systems will be restored to their original condition or better and remaining adjacent existing trees will remain and will be protected during construction work.

124th Avenue NE Corridor Project by City of Bellevue

This project is initiated by City of Bellevue (the city); Metro is reviewing the scope of work and is in negotiations with the city. The scope of work includes, but is not limited to, replacing and upgrading the culvert on 124th Avenue NE adjacent to East Base, thereby raising 124th Avenue NE by approximately 8 feet. East Base driveways will need to be rebuilt/sloped (+/- min 8% slope grade to be determined/finalized) to meet the new elevation of 124th Avenue NE. The work will remove a portion of the existing parking area in East Base. The regrading work will remove adjacent existing trees.

10. List any government approvals or permits that will be needed for your proposal, if known.

- City of Bellevue critical areas land use permit
- City of Bellevue clearing and grading permit
- City of Bellevue electrical permit
- City of Bellevue building permit

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

King County Metro Transit is proposing the East Base NRV Battery Infrastructure Project (project) at the East Base to provide electric vehicle charging stations for Metro's non-revenue vehicle (NRV) fleet. The project is in support of Washington State and King County efforts to reduce greenhouse gas emissions in accordance with King County's (2019) operational carbon neutral plan and state Executive Order 18-01, State Efficiency and Environmental Performance. Project construction and operation would occur within the 717,620-square-foot property in the southwest portion of the East Base employee parking lot, as well as within the southeast portion of the bus yard immediately outside the vehicle maintenance and operations building (project site). The bus base at the project site was originally established in 1977 and contains the bus parking area, the employee parking lot, vehicle maintenance and operations building, and fuel and wash building.

Currently, East Base employee parking lot consists of two areas divided by the bus entry off 124th Avenue NE and the West Tributary to Kelsey Creek, which runs northwest to southeast through the parking area. The northern parking area contains 42 pull-in parking spaces along the north property boundary. The southern parking area has an entry off 124th Avenue NE and consists of two one-way aisles with pull-in parking, three parallel parking spaces in the northeast, and additional pull-in parking along the west, for a total of 236 parking spaces. A cap island is located between the parking aisles and contains a cobble walkway bordered by pebbles, grass, landscape plantings, and floodlights.

The proposed project would be mostly located at the western end of the cap island, with three pedestal-

mounted electric vehicle charger stations and five charger station provisions, six electrical vehicle parking signs (EV parking signs), two bollards, two handholes, and a concrete pad supporting electrical equipment to be installed. The electrical equipment on the concrete pad would be contained in an outdoor protective enclosure, and includes a transformer, a disconnect, and an electrical panel. For simplicity, the concrete pad, transformer, a disconnect, and an electrical panel are grouped and referred to hereafter as "Transformer". Each station or provision for future stations is designed to provide outlets for two cars, for a total of 16 charging outlets. The charging stations would be protected and separated from the parking spots by bollards or wheel stops. EV parking signs would also be installed to protect parking spot use from nonelectric cars. One additional handhole would be installed in the landscaped area southeast of the vehicle maintenance and operations building.

The project would require trenching and directional boring to connect underground conduits between the southeast corner of the vehicle maintenance and operations building and the west end of the cap island, where the Transformer and charger stations or provisions, etc., would be located. Excavation for trenching and installations for conduits, EV parking signs, bollards, handholes, Transformer, and concrete foundations for pedestal-mounted electric vehicle charger station and charger station provision, would create approximately 550 square feet and 1,000 cubic feet of total ground disturbance. Required trenching to connect underground power conduits would be between the southeast corner of the vehicle maintenance and operations building and a handhole located at the southeast corner of the building landscaping. Directional boring would be used to connect underground power conduits between the handhole at the southeast corner of the building landscaping and the handhole near the Transformer at the west end of the cap island. Underground power conduits installed through trenching would be used to connect conductors from the handhole to the Transformer, charging stations, and charger station provisions. All trenching and directional boring would be conducted within paved and landscaped areas and all affected areas would be returned to the existing grade or elevation and restored to match existing conditions. Upon completion of the project, the East Base employee parking lot would provide three charging stations and five provisions for future charging stations for use by electric vehicles (Appendix A, *East Base NRV Battery Infrastructure Project 90% Design Plan Set*).

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Street address: 1975 124th Avenue NE, Bellevue, WA 98005

King County property parcel number: 2825059026

Legal description: T25N, R05E, NE and SE 1/4 of S28

B. Environmental Elements [\[HELP\]](#)

a. Earth [\[help\]](#)

a. General description of the site:

(circle one) Flat, rolling, hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope within the project site is approximately 40%.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The project site has two mapped soil units (Figure 6). Soil Unit Sk, Seattle Muck, is mapped within most of the project site, which was historically largely a wetland (Landau Associates, Inc. 2001). This soil is found in depressions and formed from grassy organic material. It is frequently flooded, poorly drained, and considered hydric. The southwest corner of the project site is mapped as AmC, Arents, Alderwood material, 6% to 15% slopes. This soil is formed from basal till and found on glacial till plains. It is rarely flooded and is well drained; it is not considered hydric. Historically, East Base has been cut along the southern portion and filled in the north, creating a diagonal transition from a glacial till/outwash in the southeast to fill in the northwest (Landau 2001). Neither soil is mapped as farmland of significance by the Natural Resources Conservation Service and neither are considered to have long-term commercial significance.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Based on public sources, there is no indication or history of unstable soils within the immediate vicinity of the project site. In addition, *Yard Lighting Replacement – King County Metro East Base* report by the Riley Group (2020) found no signs of “rotational failures, tensions cracks, or exposed soil surfaces indicating previous major landslides activities on the slope surface” for the north and southern steep slopes on the western portion of the base (Appendix C, *Geotechnical Report – The Riley Group, 2020*). It is likely the steep slopes identified on the eastern portion of the property would be similarly stable since these areas have undergone similar historical changes (cut and fill).

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

The project would require trenching and directional boring to connect underground conduits between the southeast corner of the vehicle maintenance and operations building and the west end of the cap island, where the Transformer and charger stations or provisions, etc., would be located (Figure 4). Excavation for trenching and installations for conduits, EV parking signs, bollards, handholes, Transformer, and concrete foundations for pedestal-mounted electric vehicle charger station and charger station provision, would create approximately 550 square feet and 1,000 cubic feet of total ground disturbance. Required trenching to connect underground power conduits would be between the southeast corner of the vehicle maintenance and operations building and a handhole located at the southeast corner of the building landscaping. Directional boring would be used to connect underground power conduits between the handhole at the southeast corner of the building landscaping and the handhole near the Transformer at the west end of the cap island. Underground power conduits installed through trenching would be used to connect conductors from the handhole to the Transformer, charging stations, and charger station provisions. All trenching and directional boring would be conducted within paved and landscaped areas and all affected areas would be returned to the existing grade or elevation and restored to match existing conditions. Upon completion of the project, the East Base employee parking lot would provide three charging stations and five provisions for future charging stations for use by electric vehicles (Appendix A, *90% Design Plan Set*).

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

During construction, various activities requiring excavation and soil stockpiling could temporarily reduce soil stability or increase the potential for soil erosion. These activities would include trenching and directional boring for installation of EV parking signs, bollards, conduits, three handholes, concrete footings for pedestal-mounted electric vehicle charger stations and provisions for future charger stations, and a concrete pad supporting an outdoor protective enclosure, which contains a transformer, an electrical panel, and a disconnect. Chance of significant erosion risk is low since most soil disturbance would occur on a flat terrain with mostly paved areas and some existing landscaping vegetation within compacted glacial till or fill material. All existing paved areas and landscaping vegetation would be restored to preconstruction condition. Best management practices and temporary erosion sediment control (TESC) measures would be implemented. Lay-down construction zones would be kept to the paved parking area. All construction would be contained to the East Base paved or landscaped areas.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings).

About 80% of East Base is currently covered with impervious surfaces. The amount of new impervious surface from the EV parking signs, bollards, three handholes, concrete footings for pedestal-mounted electric vehicle charger stations and provisions for future charger stations, and a concrete pad supporting an outdoor protective enclosure, which contains a transformer, an electrical panel, and a disconnect, would total approximately 57 square feet. This increased hard surface area would be 0.008% of the parcel area (based on the 717,620-square-foot East Base property, parcel number 2825059026). Therefore, the percent of East Base covered with impervious surfaces after project construction would still be approximately 80%. The new impervious surface would be located in the southwest portion of the East Base employee parking lot, as well as within the southeast portion of the bus yard immediately outside the vehicle maintenance and operations building (project site).

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Construction techniques would be implemented to reduce possible impacts from construction on steep slopes. Ground disturbance due to trenching for conduits would be minimized as much as possible through use of directional conduit boring, which would run between a handhole in the landscaped area southeast of the vehicle maintenance and operations building and a handhole near the outdoor-rated enclosure for the Transformer (Appendix A, *90% Design Plan Set*, Drawing No. 5-E100). A project-specific Stormwater Pollution Prevention Plan (SWPPP) would be prepared to reduce or control erosion that might otherwise occur during ground-disturbing activities. Best management practices and TESC measures identified in the SWPPP would be followed to control the risk of erosion. In addition, existing vegetation would be preserved to the extent practicable. Erosion control and SWPPP practices would ensure no stormwater discharges or no erosion enters into Wetland EBL or the West Tributary of Kelsey Creek.

2. Air [\[help\]](#)

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Emissions from construction vehicles and equipment may temporarily affect local air quality during construction of the project. The emission quantities have not been estimated; however, they are not

expected to exceed local emissions standards.

Fugitive dust emissions may also occur as a result of clearing, excavating, and other construction activities. Potential for fugitive dust would be higher during dry, warm weather conditions when wind and construction equipment create more dust.

Upon completion of project construction, there would be no project-related air emissions. Vehicular emissions would not increase during operation of the project. Rather, vehicular emissions are likely to be reduced from increased use of electric vehicles, thereby reducing greenhouse gas emissions and slowing the negative impacts from climate change.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No off-site sources of emissions or odor are anticipated to affect the project proposal.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Air quality impacts would be temporary and limited to the period of construction. Construction crews would be required to implement measures to minimize impacts on air quality, including (but not limited to):

- Covering loads of excavated materials
- Cleaning vehicles and equipment prior to leaving the construction area
- Installing and maintaining construction area entrances and exits
- Removing soil deposited on public lands
- Performing proper vehicle maintenance

3. Water [\[help\]](#)

a. Surface Water: [\[help\]](#)

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes. The West Tributary to Kelsey Creek is a perennial stream that runs in between the bus access road off 124th Ave NE and the southern employee parking lot. In addition to the creek, a hydrologically connected, seasonally flooded freshwater forested scrub-shrub wetland was identified in the same approximate area during the critical area investigation (Figure 3).

The West Tributary has been identified as a class F stream or fish bearing stream by the City of Bellevue and King County. The identified, seasonally flooded forested wetland is a Category III wetland with a habitat score of 5. The project site lies within the Kelsey Creek Basin, Lake Washington Watershed (WRIA) 8, State Stream #08-0259.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No temporary filling, dredging, or discharge into the West Tributary or associated wetland would occur as part of the project construction. The project is designed to avoid any work below the Ordinary High Water Mark (OHWM) of the West Tributary. No in-water work or work within the Wetland EBL footprint is required or would occur. Based on City of Bellevue designation for critical areas (LUC 20.25H.075), temporary ground disturbance work would overlap the top of bank setback (the possible excavation for two EV parking signs and conduit connection to a pedestal-

mounted electric vehicle charger station, EV-3, and a provision for pedestal-mounted electric vehicle charger station, EV-4). The current construction design for EV parking sign requires either a pedestal mount to existing curb, or a post with a footprint of 1 square foot and a concrete foundation of 2 feet below ground surface (bgs). Wetland buffer averaging was utilized so the Wetland EBL buffer and setback do not overlap the proposed project ground disturbance (Figure 7). Most of the project site is located within 200 feet of the West Tributary and Wetland EBL.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No amount of fill, dredge, or discharge material would be placed in or removed from surface water, wetlands, or waterways. The project footprints would remain above the OHWM and outside the wetland boundary.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No, the project would not require any surface water withdrawals or diversions.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No, the proposed project does not lie within the 100-year floodplain.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

The project would not discharge any waste materials to surface waters.

b. Ground Water: [\[help\]](#)

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

The project would not withdraw groundwater from a well for drinking water or other purposes. The project would not discharge water to groundwater.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

The project would not discharge waste material into the ground from septic tanks or other sources.

c. Water runoff (including stormwater):

- 1) **Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

Runoff, including stormwater, would continue to be collected via storm drains onsite. Catch basin inserts would be installed to prevent sediments from entering into existing storm drains. Any slurry produced by directional boring would be removed by methods such as using a vacuum truck and taken to a permitted facility for treatment and disposal. Water encountered during construction would be collected and pumped into a settling drum allowing particulates to settle out prior to discharging into the existing City stormwater system. The City stormwater conveyance system is isolated from, and would not drain into, West Tributary of Kelsey Creek, the wetland or wetland critical area buffer. No additional stormwater treatment facilities are proposed.

- 2) **Could waste materials enter ground or surface waters? If so, generally describe.**

Groundwater, estimated to be approximately 10 feet bgs in some areas of the project site, should not be encountered during installation of EV parking signs, bollards, handholes, the Transformer, pedestal-mounted electric vehicle charger stations or provisions, and conduits since the maximum excavation depth would be only 4 feet bgs. If groundwater is encountered during excavation, it would be collected and pumped into a settling drum allowing particulates to settle out prior to discharging into the existing storm conveyance system. Directional boring for conduit installation could be up to 20 feet bgs. Any slurry produced by directional boring would be removed by methods such as using a vacuum truck and taken to a permitted facility for treatment and disposal. Finally, there is a potential contamination risk to groundwater quality from accidental release or exposure to gasoline, oil, hydraulic fluids, and related materials during the use and operation of construction equipment. This risk would be mitigated through best management practices for accidental leaks from construction equipment during construction.

- 3) **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

No, the project would not alter or otherwise affect drainage patterns in the vicinity of the site.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Prior to project construction, the contractor would provide a project-specific SWPPP to reduce or control any groundwater, stormwater, and drainage pattern impacts that might otherwise occur during ground-disturbing activities. Best management practices and temporary erosion and sediment control (TESC) measures identified in the SWPPP would be followed to control the risk of erosion. In addition, existing vegetation would be preserved to the extent practicable. Erosion control and SWPPP practices would ensure no stormwater discharges or no erosion enters into Wetland EBL or West Tributary to Kelsey Creek. The SWPPP would include a dewatering plan to address the risk of contaminating groundwater, if encountered.

4. Plants [\[help\]](#)

- a. **Check the types of vegetation found on the site:**

 X deciduous tree: alder, maple, aspen, other: Pacific Madrone, English Hawthorn, Paper Birch, Cascara Buckthorn, Balsam Poplar, Bitter Cherry, Pacific Willow, Weeping Willow

- ☒ evergreen tree: fir, cedar, pine, other
- ☒ shrubs
- ☒ grass
- ☐ pasture
- ☐ crop or grain
- ☐ Orchards, vineyards or other permanent crops.
- ☒ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other: Common Rush,
Reed Canary Grass
- ☒ water plants: water lily, eelgrass, milfoil, other: watercress, duckweed
- ☐ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Existing vegetation would be protected to the extent possible and removed vegetation would be restored to preconstruction condition. Ground disturbance would involve trenching and boring for installation of conduits, EV parking signs, bollards, handholes, Transformer, and concrete foundations for pedestal-mounted electric vehicle charger station and charger station provision. The majority of excavation would occur in previously disturbed areas (e.g. landscaped area, pebble ground cover, and grass patches) or beneath currently covered impervious surfaces.

c. List threatened and endangered species known to be on or near the site.

No threatened or endangered plant species have been documented within or adjacent to the project site (Washington Department of Natural Resources 2019).

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Minimal revegetation would be required following the completed project since the installation of pedestal-mounted electric vehicle charger stations and other associated equipment would occur in previously disturbed areas that are mostly covered by concrete, asphalt, or pebble ground cover. When the construction is completed, the contractor will replant vegetation in the disturbed landscaped area and restore the disturbed impervious areas to preconstruction conditions.

If required by the City of Bellevue, possible compensatory mitigation could include removing invasive species such as reed canary grass (*Phalaris arundinacea*) along the creek banks and Himalayan blackberry (*Rubus armeniacus*) and English ivy (*Hedera helix*) along the southern property boundary, though no riparian or wetland vegetation would be affected or degraded from construction or operation of the project. Removal of invasive species would allow native herbs and shrubs to establish, possibly reducing spread of invasive species downstream. Native shrubs would help shade the stream, lowering water temperature, which could improve overall fish habitat within the tributary. All proposed available mitigation measures would occur within the critical areas or associated buffers in the project site. No offsite mitigation is proposed.

e. List all noxious weeds and invasive species known to be on or near the site.

According to the Washington State Noxious Weed Control Board list (2021), the project site contains the following noxious weeds: Poison Hemlock (*Conium maculatum*), English Hawthorn (*Crataegus monogyna*), Scotch Broom (*Cytisus scoparius*), Robert Geranium (*Geranium robertianum*), English Ivy (*Hedera helix*), Reed Canary Grass (*Phalaris arundinacea*), and Himalayan Blackberry (*Rubus armeniacus*).

5. Animals [\[help\]](#)

- a. **List any birds and other animals which have been observed on or near the site or are known to be on or near the site.**

Examples include:

birds: hawk, heron, eagle, songbirds, other: American Crow; Anna's Hummingbird; American Goldfinch; Northern Flicker; Glaucous-winged Gull; Band-tailed Pigeon; Common Raven; mallard
mammals: deer, bear, elk, beaver, other: beaver sign
fish: bass, salmon, trout, herring, shellfish, other _____

- b. **List any threatened and endangered species known to be on or near the site.**

The Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species map (2020) documents resident coastal cutthroat trout (*Oncorhynchus clarki*) occurring within and migrating through the project site. WDFW SalmonScape (2020) also documents Chinook (*Oncorhynchus tshawytscha*), coho (*Oncorhynchus kisutch*), and steelhead (*Oncorhynchus mykiss*) accessible habitat in the West Tributary. Although the *2016 West Tributary Habitat Assessment* also determined the tributary to be appropriate fish habitat, it stated there was no spawning habitat along the reach within the project site and habitat quality suffered from dense reed canary grass (*Phalaris arundinacea*; Tetra Tech 2016). Finally, Ecology's *Puget Sound Watershed Characterization Project* (2019) notes the watershed basin is important for local salmonid habitat but has poor quality wetland, floodplain, and terrestrial habitats for other wildlife.

- c. **Is the site part of a migration route? If so, explain.**

The project site is located along the Pacific Flyway migration route for birds. Since no riparian vegetation would be removed for the project, impacts on migrating birds are unlikely.

- d. **Proposed measures to preserve or enhance wildlife, if any:**

Construction activities have been sited to avoid work in or around jurisdictional waters to protect existing resources.

- e. **List any invasive animal species known to be on or near the site.**

The Kelsey Creek Basin is infested with the New Zealand Mud Snail (*Potamopyrgus antipodarum*). Although the species has yet to be detected in the onsite reach of Kelsey Creek, they have been detected in areas of Kelsey Creek that flow into this tributary.

6. Energy and Natural Resources [\[help\]](#)

- a. **What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

The project would require electricity to power the electrical vehicle charger stations.

- b. **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**

The project would not affect the potential use of solar energy by adjacent properties.

- c. **What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:**

The intent of this project is to provide electric vehicle charging stations for Metro's non-revenue vehicle (NRV) fleet at East Base in order to support Washington State and King County efforts to reduce greenhouse gas emissions in accordance with King County's (2019) operational carbon neutral plan and state Executive Order 18-01, State Efficiency and Environmental Performance. By providing electric vehicle charging stations instead of stations that use fossil fuel, the project will reduce the NRV fleet's fossil fuel consumption, greenhouse gas emission, and carbon footprint.

7. Environmental Health [\[help\]](#)

- a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.**

Metro's East Base is an active transit operations and maintenance facility. The project site consists of a bus yard that houses approximately 210 diesel-electric hybrid buses, the employee parking lot, a vehicle maintenance and operations building, and a fuel and wash building. Operation and maintenance of the Metro fleet at East Base requires the storage and use of fuels, lubricants, antifreeze, and various chemicals associated with vehicle maintenance.

Eight underground storage tanks (USTs), four fuel (3 diesel, 1 unleaded gasoline) and four non-fuel (transmission fluid, motor oil, antifreeze, and used oil), are located near the fuel and wash building at the northeast corner of East Base. East Base has a history of petroleum releases to the environment from the UST area and is listed by the Washington State Department of Ecology (Ecology) as Facility Site ID 18962661 (Appendix B) and Cleanup Site ID 7067. Ecology lists site status as "Cleanup Started." Ongoing groundwater monitoring indicates that petroleum contamination is located in the vicinity of the USTs and extends northeast towards the East Base fence line.

Due to the project site's location, planned ground disturbance that involves trenching and boring for installation of EV parking signs, bollards, handholes, Transformer, and concrete foundations for pedestal-mounted electric vehicle charger station and charger station provision, and conduits (Figures 4 & 5) has a low potential to encounter petroleum contamination originating from the USTs in the northeast corner of East Base and currently unknown contamination throughout the remainder of East Base. The project site is located south of the fuel and wash building and is not close to any USTs. However, use and maintenance of construction equipment has the potential to release contaminants into the environment.

While not an element of the subject project, Metro is developing plans to address contaminated soil and groundwater originating in the UST area. This likely will include entering into a cleanup agreement with the Pollution Liability Insurance Agency (PLIA) or Ecology, as appropriate. For this project and subsequent project in the vicinity of the historic release, Metro will follow Ecology's Guidance for Remediation of Petroleum Contaminated Sites ([Guidance for Remediation of Petroleum Contaminated Sites \(wa.gov\)](https://www.wa.gov)).

1) Describe any known or possible contamination at the site from present or past uses.

As stated above, East Base has a history of spills and piping leaks associated with the USTs. The original USTs were installed at East Base in 1976. The original piping developed leaks and over filling and surface spills resulted in soil and groundwater contamination. On October 7, 1995, diesel release from pressurized diesel supply line was identified. Testing revealed a leak in the secondary containment system that escaped the gravel backfill around the tanks. Four inches of free product was found to be floating on top of groundwater. The leaks were repaired and free product was removed from groundwater during the winter of 1995. This event was listed by Ecology as Cleanup Site ID 6026. A No Further Action determination for this event was issued by Ecology in January of 1998.

A cracked spill bucket was replaced in 2012. During replacement of the spill bucket, a small localized area of staining was observed near the surface of the removed backfill materials, and this contamination was believed to have been fully removed. Using a vac truck, King County Metro Transit removed 1,500 gallons of groundwater twice a week for 3 weeks in January of 2013 (for a total of 9,000 gallons) from dewatering wells in the tank area. Subsequent groundwater testing revealed elevated levels of diesel range total petroleum hydrocarbons (TPH-D). Semi-annual groundwater testing at East Base continues to reveal elevated levels of TPH through 2021.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

Planned ground disturbance that involves trenching and boring for installation of EV parking signs, bollards, handholes, the Transformer, pedestal-mounted electric vehicle charger stations or provisions, and conduits (Figures 4 & 5) has a low potential to encounter petroleum contamination from the USTs in the northeast corner of East Base and currently unknown contamination throughout the remainder of East Base. The project site is located south of the fuel and wash building and is not close to any USTs.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

The use and operation of construction equipment creates typical risks of exposure to gasoline, oil, hydraulic fluids, and related materials associated with accidental release. To reduce these risks, equipment maintenance and refueling would occur in a designated area and appropriate containment measures would be implemented in accordance with King County standard construction specifications.

Operations of the pedestal-mounted electric vehicle charger stations, provisions, and associated equipment would not generate or require any use or storage of toxic or hazardous chemicals over the operational life of the project.

4) Describe special emergency services that might be required.

The need for special emergency services is not anticipated for this project. Construction will

occur in a highly urbanized area where emergency services are readily available and entry to East Base is easily accessed should these services be needed.

5) Proposed measures to reduce or control environmental health hazards, if any:

The contractor would prepare a detailed Spill Prevention Control and Countermeasures Plan, which would identify all of the contingencies in the event of an accidental spill of hazardous materials. Equipment would be refueled in a designated area, with absorbent pads in place and spill containment equipment present to reduce the potential for contaminants to reach surface water or groundwater should any sort of accidental release occur. All heavy equipment would be inspected prior to operating each day during construction.

The contractor would be required to develop a contaminated materials management plan. This plan would include the requirement that construction workers be trained to recognize suspected contaminated soil and groundwater. Should suspected contaminated material be encountered, the contractor would be required to halt work at that location. The suspect material would be tested to determine the presence of contamination. If confirmed, contaminated material excavated or extracted would be isolated from the environment and disposed of per regulation.

Metro would follow Ecology's Guidance for Remediation of Petroleum Contaminated Sites ([Guidance for Remediation of Petroleum Contaminated Sites \(wa.gov\)](https://www.wa.gov/guidance/remediation-petroleum-contaminated-sites)), as appropriate.

The contractor also would be required to develop a site and project specific Health and Safety Plan covering all aspects of the contractor's work activities related to the work and site conditions. This would include measures to protect workers from exposure to hazardous materials, including potential soil and groundwater contamination.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Existing noise sources consist primarily of traffic and industrial activities near and at the project site. None of these existing sources of noise would affect the project.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Construction noise would be temporary and result from the use of vehicles and equipment. Construction noise from the project would occur during the regularly permitted hours for construction within the city limits of Bellevue outlined in the Bellevue City Code (BCC 9.18).

3) Proposed measures to reduce or control noise impacts, if any:

Short-term increases in noise would be limited to the construction period. To minimize noise impacts on the surrounding land uses, construction activities would be conducted during daytime hours as outlined by Bellevue City Code (BCC 9.18).

8. Land and Shoreline Use [\[help\]](#)

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The project site is the East Base facility for King County Metro Transit.

The surrounding parcels are a mixture of commercial, business, and industrial uses with residential properties farther to the north and west.

The project would not affect current land uses on nearby or adjacent properties.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?**

The project site has not been used as working farmlands or working forest lands. The project site is in an industrialized area of Bellevue that is highly built out.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:**

The project will not affect or be affected by surrounding working farm or forest land normal business operations because there are no working farm or forest land near the project site.

- c. Describe any structures on the site.**

The project site mainly has two large buildings onsite. One building contains office space and 12 bays for the maintenance of a fleet of transit buses. The other building is used for cleaning and fueling the buses.

- d. Will any structures be demolished? If so, what?**

No habitable structures would be demolished as a result of the project.

- e. What is the current zoning classification of the site?**

The project site is currently zoned as BR-OR-2 (Bellevue Redmond Office Residential).

- f. What is the current comprehensive plan designation of the site?**

The designation is Mixed Use.

- g. If applicable, what is the current shoreline master program designation of the site?**

No part of the site is within any designated shorelines.

- h. Has any part of the site been classified as a critical area by the city or county? If so, specify.**

Yes. The West Tributary is a designated critical area and runs along the north property boundary of East Base.

i. Approximately how many people would reside or work in the completed project?

This project would not result in an increase in staff.

j. Approximately how many people would the completed project displace?

This project would not displace any people.

k. Proposed measures to avoid or reduce displacement impacts, if any:

No measures are proposed because no displacement impacts would occur.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

This project would not change any land uses; no measures are proposed.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

There are no nearby agricultural or forest lands of long-term commercial significance near the project site; no measures are proposed.

9. Housing [\[help\]](#)

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

No housing units would be provided.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

No housing units would be eliminated.

c. Proposed measures to reduce or control housing impacts, if any:

The project would not result in housing impacts; no measures are proposed.

10. Aesthetics [\[help\]](#)

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The tallest structure should be the outdoor protective enclosure encasing the transformer, electrical panel, and disconnect. The enclosure, measured 88 inches tall, would be bolted to a 6-inch concrete pad, and the combined height would be 94 inches above grade. The pedestal-mounted electrical charger stations are approximately 6 feet tall. The principal exterior materials of these structures would be plastic and metal.

b. What views in the immediate vicinity would be altered or obstructed?

No views in the immediate vicinity would be altered or obstructed.

b. Proposed measures to reduce or control aesthetic impacts, if any:

The project would not alter the aesthetics of the current site use; no measures to reduce or control aesthetic impacts are proposed.

11. Light and Glare [\[help\]](#)

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The proposal would produce no light or glare.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No, the proposal would produce no light or glare.

c. What existing off-site sources of light or glare may affect your proposal?

No existing off-site sources of light or glare would affect the proposal.

d. Proposed measures to reduce or control light and glare impacts, if any:

There are no proposed measures to reduce or control light and glare impacts as the proposal would produce no light or glare.

12. Recreation [\[help\]](#)

a. What designated and informal recreational opportunities are in the immediate vicinity?

There are limited recreational opportunities in the immediate vicinity of the project site. King County's Eastrail multi-use trail is located approximately 750 feet west of the project site. Eastrail provides opportunities for nonmotorized recreation and transportation.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No, the project would not displace any existing recreational uses.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No recreational opportunities would be provided by the project. The project would have no impacts on recreation; no measures are proposed.

13. Historic and cultural preservation [\[help\]](#)

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

There are no recorded, reported, or suspected cultural resources on the project site or in the vicinity.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.**

There are no recorded, reported, or suspected cultural resources on the project site or in the vicinity.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.**

The cultural resources screening was conducted by King County Archaeologist Tom Minichillo on September 1, 2021, using the Department of Archeological and Historic Preservation WISAARD database and the King County Cultural Resource Protection Project database. Mr. Minichillo's screening report concluded that the general setting of the project site on an existing graded and paved lot with no recorded, reported, or suspected sites in the vicinity suggests a low likelihood for buried intact prehistoric archaeological deposits. The project site is not within a historic district. As a result, no further cultural resources review was needed.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.**

No measures are proposed because no known resources would be affected. In accordance with state law, if any suspected human remains or archaeological deposits are encountered during construction, then all activities would cease in that area while county policies are complied with.

14. Transportation [\[help\]](#)

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.**

The adjacent street, 124th Avenue NE, is the primary arterial that provides access to the facility. There is limited restricted access from 120th Avenue NE.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?**

The alignment of Route 226 is approximately 0.5 mile south of the project site. No Metro routes serve the project site.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?**

No additional parking spaces would be constructed as a result of the completed project. No parking

spaces would be eliminated as a result of the completed project.

- d. **Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).**

No, the project would not require any new or improved roads, streets, pedestrian, bicycle, or state transportation facilities. The existing cobble walkway located between the parking aisles in the employee parking lot would be restored to preconstruction condition.

- e. **Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

No, the project would not use water, rail, or air transportation.

- f. **How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?**

The project would not affect the number of vehicular trips following construction.

- g. **Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.**

No, the project would not interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area because this is an urban area.

- h. **Proposed measures to reduce or control transportation impacts, if any:**

Primary impacts on transportation would consist of machinery, equipment, and vehicles coming from and going to the construction site via 124th Avenue NE or 120th Avenue NE. Peak construction is expected to require six to eight vehicular trips per day. Since the project is entirely contained within the East Base, impacts on traffic are expected to be minimal and a project traffic control plan is unlikely to be needed or required.

15. Public Services [\[help\]](#)

- a. **Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.**

No, the project would not result in an increased need for public services.

- b. **Proposed measures to reduce or control direct impacts on public services, if any.**

No measures are needed to reduce or control direct impacts on public services. The project would not affect the need for public services in the region.

16. Utilities [\[help\]](#)

a. ~~Circle utilities currently available at the site:~~

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____

c. **Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

The area electrical utility is Puget Sound Energy (PSE). The replacement or installation of conduit for the electric charger stations and associated equipment and connection to the PSE system would be needed. No change to the existing utility service, but discussions with PSE regarding the connection would proceed if needed.

C. Signature [\[HELP\]](#)

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Lawrence Chung

Name of Signee: Lawrence Chung

Position and Agency/Organization: Transit Environmental Planner/KC Metro Transit

Date Submitted: 11/04/2021

Appendices

- Appendix A East Base NRV Battery Infrastructure Project 90% Design Plan Set
- Appendix B Washington State Department of Ecology Facility/Site index
- Appendix C Geotechnical Report – The Riley Group, 2020

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Figure 1
East Base Project Site and Vicinity

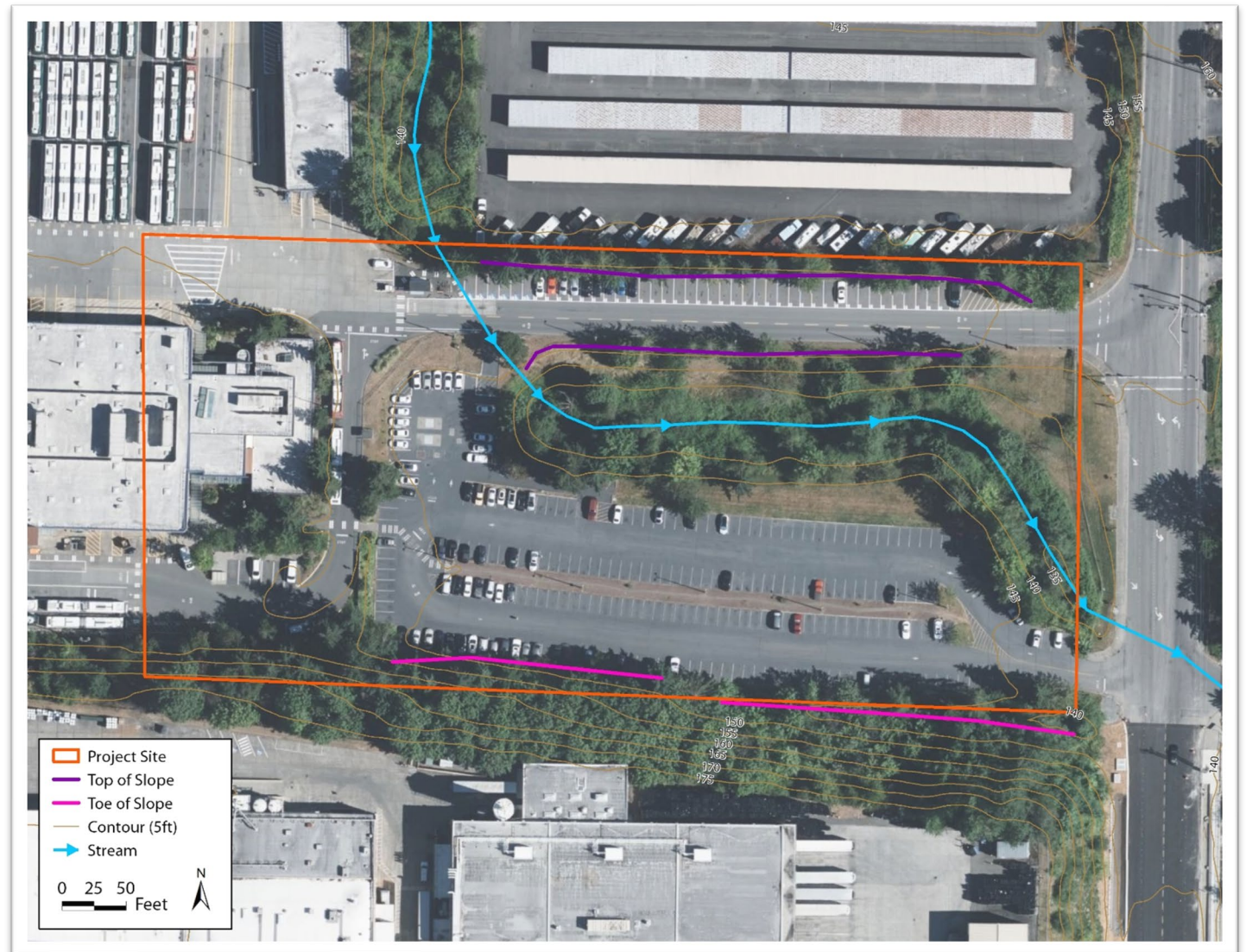


Figure 2
East Base Project Site and Adjacent Critical Areas



Figure 3

West Tributary OHWM Determination, Wetland Delineation, and Sample Plots



Figure 4
Temporary Impacts During Construction (No Buffer and Setback Exclusions)



Figure 5
Permanent Impacts During Operation (No Buffer and Setback Exclusions)

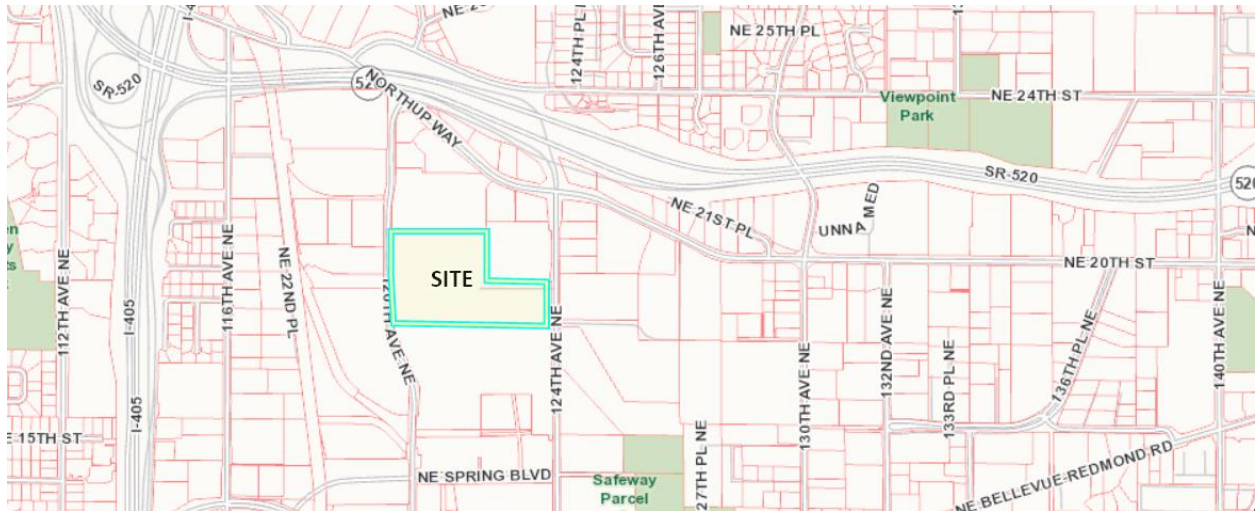


Figure 6
Soil Units Mapped in the Project Area, as indicated by orange box, and Hydric Soil Rating (NRCS 2019)



Figure 7
Wetland Buffer Averaging During Construction (Adjustment Outlined in Black within Buffer)

Vicinity Map



KING COUNTY METRO TRANSIT EAST BASE NRV BATTERY INFRASTRUCTURE PROJECT

FINAL WETLAND DELINEATION AND CRITICAL AREA REPORT

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September 2021



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Acronyms and Abbreviations

bgs	below ground surface
Corps	U.S. Army Corps of Engineers
County	King County Metro
CWA	Clean Water Act
DNR	Washington State Department of Natural Resources
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
FAC	facultative
FACU	facultative upland
FACW	facultative wet
FR	Federal Register
GMA	Growth Management Act
GPS	global positioning system
HGM	hydrogeomorphic
HUC	hydrologic unit code
LUC	land use code
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OBL	obligate
OHWM	ordinary high water mark
RCW	Revised Code of Washington
Regional Supplement	<i>Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region</i>
SEPA	State Environmental Policy Act
SWPPP	Stormwater Pollution Prevention Plan
TESC	temporary erosion sediment control
UPL	upland
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WAC	Washington Administrative Code
WDFW	Washington Department of Fish and Wildlife
WRIA	Water Resource Inventory Area

1.1 Background

In accordance with City of Bellevue Land Use Code (LUC) 20.25H.005, within a project site, the presence or absence of critical areas, such as wetland, streams, steep slopes, and wildlife habitat, must be determined. ICF is supporting King County Metro Transit (Metro) to determine the location of critical areas and associated buffers, possible impacts from the project, and feasible mitigation measures.

1.2 Project Description

King County Metro Transit is proposing the East Base NRV Battery Infrastructure Project (project) at the East Base to provide electric vehicle charging stations for Metro's non-revenue vehicle (NRV) fleet. The project is in support of Washington State and King County efforts to reduce greenhouse gas emissions in accordance with King County's (2019) operational carbon neutral plan and state Executive Order 18-01, State Efficiency and Environmental Performance. Project construction and operation would occur within the 717,620-square-foot property in the southwest portion of the East Base employee parking lot, as well as within the southeast portion of the bus yard immediately outside the vehicle maintenance and operations building (project site). The bus base at the project site was originally established in 1977 and contains the bus parking area, the employee parking lot, vehicle maintenance and operations building, and fuel and wash building.

Currently, East Base employee parking lot consists of two areas divided by the bus entry off 124th Avenue NE and the West Tributary to Kelsey Creek, which runs northwest to southeast through the parking area. The northern parking area contains 42 pull-in parking spaces along the north property boundary. The southern parking area has an entry off 124th Avenue NE and consists of two one-way aisles with pull-in parking, three parallel parking spaces in the northeast, and additional pull-in parking along the west, for a total of 236 parking spaces. A cap island is located between the parking aisles and contains a cobble walkway bordered by pebbles, grass, landscape plantings, and floodlights.

The proposed project would be mostly located at the western end of the cap island, with three pedestal-mounted electric vehicle charger stations and five charger station provisions, six electrical vehicle parking signs (EV parking signs), two bollards, two handholes, and a concrete pad supporting electrical equipment to be installed. The electrical equipment on the concrete pad would be contained in an outdoor protective enclosure, and includes a transformer, a disconnect, and an electrical panel. For simplicity, the concrete pad, transformer, a disconnect, and an electrical panel are grouped and referred to as "Transformer" in report figures and Chapter 5, *Application of City of Bellevue Regulations*. Each station or provision for future stations is designed to provide outlets for two cars, for a total of 16 charging outlets. The charging stations would be protected and separated from the parking spots by bollards or wheel stops. EV parking signs would also be installed to protect parking spot use from nonelectric cars. One additional handhole would be installed in the landscaped area southeast of the vehicle maintenance and operations building.

The project would require trenching and directional boring to connect underground conduits between the southeast corner of the vehicle maintenance and operations building and the west end of the cap island, where the Transformer and charger stations or provisions, etc., would be located. Excavation for trenching and installations for EV parking signs, bollards, handholes, Transformer, and concrete foundations for pedestal-mounted electric vehicle charger station and charger station provision, would create approximately 550 square feet and 1,000 cubic feet of total ground disturbance. Required trenching to connect underground power conduits would be between the southeast corner of the vehicle maintenance and operations building and a handhole located at the southeast corner of the building landscaping. Directional boring would be used to connect underground power conduits between the handhole at the southeast corner of the building landscaping and the handhole near the Transformer at the west end of the cap island. Underground power conduits installed through trenching would be used to connect conductors from the handhole to the Transformer, charging stations, and charger station provisions. All trenching and directional boring would be conducted within paved and landscaped areas and all affected areas would be returned to the existing grade or elevation and restored to match existing conditions. Upon completion of the project, the East Base employee parking lot would provide three charging stations and five provisions for future charging stations for use by electric vehicles (Appendix A, *90% Design Plan Set*).

2.1 Local Regulations

The Washington State Growth Management Act (GMA) of 1990 requires that comprehensive growth plans be developed by counties and cities with state oversight. The GMA specifically lists five “critical areas” for which local governments must designate and develop protection and enhancement programs. These five areas are fish and wildlife habitat, wetland, aquifer recharge areas, flood hazard areas, and geological hazard areas. In the City of Bellevue’s Critical Area Ordinance and Land Use Code, these areas include Streams and Riparian Areas (LUC 20.25H.075), Wetlands (LUC 20.25H.095), Habitats for Species of Local Importance (LUC 20.25H.150), Frequently Flooded Areas (LUC 20.25H.175), and Geological Hazard Areas (LUC 20.25H.120). Projects that would be within these critical areas or associated buffers and structural setbacks are required to complete a critical area report and Washington State Environmental Policy Act (SEPA) checklist as part of obtaining a City of Bellevue Critical Areas Land Use permit (City of Bellevue 2019).

2.1.1 Buffers and Structural Setbacks

Associated critical area buffers and structural setbacks are described in LUC 20.25H.035 and summarized in Table 1. Wetland buffers and setbacks are determined through the Washington State Department of Ecology (Ecology) wetland rating system’s overall category and habitat score, unless they are already included in an established Native Growth Protection Areas or Native Growth Protection Easements plan. If a wetland buffer or structural setback extends into a primary structure established prior to August 1, 2006, this buffer or structural setback shall be modified to exclude the structure (LUC 20.25H.095.D.1.b).¹

Table 1. Wetland Critical Area Buffer and Structural Setback

Wetland Category	Habitat Score	Buffer (feet)	Structural Setback (feet)
I	8–9	225	20
	5–7	110	
	3–4	75	
II	8–9	225	20
	5–7	110	
	3–4	75	
III	8–9	225	15
	5–7	110	
	3–4	60	
IV	All	40	None

¹ The classification of legal nonconforming primary structure, subject to City of Bellevue’s interpretation, could be applicable to the East Base and the project could exclude wetland buffer and setback requirements as the entire East Base was established well before August 1, 2006.

Stream buffers and structural setbacks are typically determined through Washington State Department of Natural Resources (DNR) stream type (LUC 20.25H.075.B). However, per City of Bellevue ordinance, streams within the Kelsey Creek basin have specific buffer and setback ordinances. As such, the entire reach of the West Tributary, Kelsey Creek basin is required to have a 50-foot buffer and additional 20-foot setback from the top of bank (LUC 20.25H.075.C.1.c and LUC 20.25H.075.D.2.c). *Top of bank* is defined by the City of Bellevue as an area 50 feet out beyond a break that is flatter than 3:1 (LUC 20.50.048).

Steep slope buffers and structural setbacks are determined from the top or toe of slope. From the toe of slope, the City of Bellevue requires a 75-foot setback with no mandatory buffer (LUC 20.25H.120.C.2.b); at the top of slope, a 50-foot buffer with no mandatory structural setback is required (LUC 20.25H.120.B.1.b). As previously stated, if a steep slope buffer or structural setback extends into a primary structure established prior to August 1, 2006, this buffer or structural setback shall be modified to exclude the structure (LUC 20.25H.120.B.2).

2.2 State Regulations

Ecology requires and regulates permits for discharges into state waters and wetland under the state Water Pollution Control Act and federal Clean Water Act (CWA) Water Quality Certification (Section 401). Ecology has authority under the Water Pollution Control Act to regulate any change in the physical, biological, or chemical properties of any waters of Washington (Revised Code of Washington [RCW] 90.48.020). Additionally, under the Washington State Hydraulic Code, a Hydraulic Project Approval is required from the Washington Department of Fish and Wildlife (WDFW) for any changes to a wetland or stream that may affect hydrology downstream (Washington Administrative Code [WAC] Chapter 220-660). The Hydraulic Project Approval typically also requires a SEPA determination from the local government to analyze current conditions and possible impacts from a proposed project (RCW Chapter 43.21C). If project work does not result in discharge into state waters and wetland or change to downstream hydrology during project construction or operation, these permits would not be required.

2.3 Federal Regulations

Any project or development that discharges dredged and fill material into a water of the United States is required to obtain a nationwide or individual permit from the U.S. Army Corps of Engineers (Corps) (33 United States Code [U.S.C.] Section 1251 et seq.; CWA Section 404). If project work does not result in discharge or fill into waters of the United States during project construction or operation, this permit would not be required. As no navigable waterway is within the King County Metro East Base, any streams or wetland identified during the delineation would not be regulated under Section 10 of the Clean Rivers and Harbors Act.

2.3.1 Determination of Potentially Jurisdictional Ditches

Jurisdictional ditches have the potential to provide functions such as water quality treatment, sediment removal, and stormwater conveyance. In the past, ditches could be regulated by the Corps if they meet criteria demonstrating they have a direct and significant connection to a regulated water of the United States. However, as of June 20, 2020, the Navigable Waters Protection Rule (84

Federal Register [FR] 56626) became final, removing potentially jurisdictional ditches from being considered a water of the United States. A brief history of the determination of potentially jurisdictional ditches is provided here.

In June 2007, the Corps issued Regulatory Guidance Letter No. 07-01 on the Practices for Documenting Jurisdiction under Sections 9 and 10 of the Rivers and Harbors Act of 1899 and Section 404 of the CWA (Corps 2007). This letter was in response to the June 19, 2006, ruling by the U.S. Supreme Court on *Rapanos v. United States*, 547 U.S. 715 (2006), which did not clarify the definition of a jurisdictional “water of the United States.” On June 29, 2015, the U.S. Environmental Protection Agency (EPA) published the Clean Water Rule (80 FR 37054, June 29, 2015). The final rule became effective on August 28, 2015 but was subsequently stayed (not enacted) nationwide as of October 9, 2015, by the U.S. Court of Appeals for the Sixth Circuit. On December 23, 2019, the EPA repealed the 2015 Clean Water Rule as “Step One” in a two-step process to streamline and unify what is defined as a water of the United States across federal and state agencies under the Navigable Waters Protection Rule (84 FR 56626). Step Two, published April 21, 2020, became final on June 20, 2020. Per the final rule, ditches, groundwater, diffuse stormwater runoff, converted cropland, ephemeral streams—those streams that are only fed through precipitation—and artificial irrigation areas and lakes and ponds are no longer to be considered a water of the United States (85 FR 22250). Consequently, potentially jurisdictional ditches no longer need to be considered at a federal level.

3.1 Desktop Analysis

Prior to fieldwork, the potential for critical areas to be present at the project site and adjacent areas was evaluated by conducting a desktop analysis using the following sources. Figures generated from agency websites are provided in Appendix B, *Additional Figures*.

- Aerial photographs viewed in Google Earth
- City of Bellevue Stream and Critical Areas Map (City of Bellevue 2018a)
- City of Bellevue Geologic Hazards Map (City of Bellevue 2018b)
- Ecology Puget Sound Watershed Characterization Project (Ecology 2019)
- Flood Insurance Rate Map for King County Washington Incorporated Areas, Panel 368 of 1725 (Federal Emergency Management Agency 1995)
- King County iMaps (King County 2020)
- Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2019)
- NRCS WETS table (National Water and Climate Center 2020)
- Tetra Tech West Tributary Habitat Assessment, Final Report (Tetra Tech 2016)
- U.S. Geological Survey (USGS) 7.5-minute series Kirkland quadrangle topographic map (USGS 2017a)
- USGS 7.5-minute series Mercer Island quadrangle topographic map (USGS 2017b)
- U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) data (USFWS 2019)
- WDFW Priority Habitats and Species: Maps (WDFW 2020a)
- WDFW SalmonScape (WDFW 2020b)
- Washington Natural Heritage Program, rare and imperiled species and plant communities (DNR 2019)

3.2 Fieldwork

The wetland delineation was conducted using the methods outlined in the Corps' 1987 *Wetlands Delineation Manual* (Environmental Laboratory 1987) and the 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Regional Supplement; Environmental Laboratory 2010). The stream ordinary high water mark

(OHWM) was established within the property boundary per Ecology's *Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State* (Ecology 2016).

ICF collected field data on November 9, 2020; wetland boundaries were documented using the Regional Supplement data forms. Wetland boundaries were identified using sample plots where data on vegetation, soils, and observable hydrology was collected. Eight sample plots were recorded to document wetland and adjacent upland conditions; the data forms are presented in Appendix C, *U.S. Army Corps of Engineers Wetland Delineation Data Forms*. Two OHWM field data forms are presented in Appendix D, *Washington State Department of Ecology OHWM Determination Forms*. The associated Wetland Rating Forms are presented in Appendix E, *Washington State Department of Ecology Wetland Rating Forms*. Prior to the field survey, hydrological conditions were reviewed to determine if hydrological conditions could be considered wet, normal, or dry (Appendix F, *WETS Tables*). A photo log of existing conditions along West Tributary and the southern steep slope is provided in Appendix G, *Photo Log*, and a plant list of vegetation observed during fieldwork is provided in Appendix H, *Study Area Plant and Bird List*.

Wetland boundaries, stream OHWM, and sample plot locations were flagged in the field and recorded using a sub-meter global positioning system (GPS) unit. Formal sample plot locations were marked in the field using pink flags labeled with the sample identifier.

3.2.1 Hydrology

Wetland hydrology is defined as soil inundation or saturation for sufficient duration to develop hydric soils that support vegetation typically adapted for life in periodically anaerobic soil conditions (Environmental Laboratory 1987, 2010). Primary indicators of wetland hydrology include inundation (i.e., standing water), saturation in the upper 12 inches of the soil column, shallow water table (upper 12 inches), water marks or lines on adjacent stationary objects (e.g., trees), sediment deposits or drift lines on vegetation, oxidized rhizospheres along living roots, and water-stained leaves, among others. The presence of two or more secondary hydrology indicators also satisfies the Corps' criteria for evidence of wetland hydrology. Secondary indicators include surface drainage patterns, a dry-season water table, shallow aquitard, saturation on aerial photography, geomorphic position, or facultative (FAC)-neutral test (Environmental Laboratory 2010).

3.2.2 Soils

Hydric soils are defined as soils that are saturated, flooded, or ponded for sufficient duration during the growing season to develop anaerobic (i.e., reducing) conditions in the upper layers (Environmental Laboratory 1987, 2010). Hydric soils were identified in the field by digging soil pits to at least a 16-inch depth, where possible, and examining the soil profile for hydric soil indicators as defined by the National Technical Committee for Hydric Soils (NRCS 2018). A soil may be considered hydric if any one of the following indicators is present:

- More than 50% organic material in the upper horizon
- Strong sulfidic odor
- Morphological characteristics that meet specific hydric soil indicators (NRCS 2018; Environmental Laboratory 1987, 2010)

Soil texture, matrix color, and presence of redoximorphic features, depleted matrix, or other relevant hydric soil indicators were recorded on the Regional Supplement field data forms (Appendix C). Soil hue, value, and chroma were determined using the Munsell Soil Color Chart System (Munsell Color Services 2000).

3.2.3 Hydrophytic Vegetation

Hydrophytic vegetation are plants that have adapted a tolerance for prolonged periods of saturation or inundation. Under normal conditions, hydrophytic vegetation is considered present if more than 50% of the dominant species from each stratum—tree, shrub, vine, and herbaceous—are classified as obligate (OBL), facultative wet (FACW), and/or FAC, according to the USFWS publication *The National Wetland Plant List: 2016 Wetland Ratings* (Lichvar et al. 2016). These classifications are based on the likelihood that a certain plant species occurs within a wetland, as shown in Table 2.

Table 2. Plant Species Indicator Category Definitions

Category	Definition
Obligate (OBL)	Plants that almost always occur in wetlands (estimated probability >99%) under natural conditions.
Facultative wet (FACW)	Plants that usually occur in wetlands (estimated probability 67%–99%) but are occasionally found in nonwetland areas.
Facultative (FAC)	Plants that are equally likely to occur in wetlands or nonwetlands (estimated probability 33%–67%).
Facultative upland (FACU)	Plants that usually occur in nonwetlands (estimated probability 67%–99%).
Upland (UPL)	Plants that usually occur in nonwetlands (estimated probability >99%) under natural conditions.

Source: Lichvar et al. 2016.

Plant species were identified using standard taxonomic references (Cooke 1997; Pojar and Mackinnon 2004; Hitchcock and Cronquist 1973). Dominant species were determined by using the 50/20 rule, where dominants are the most abundant species that individually or collectively account for more than 50% of the total coverage of vegetation in the stratum (layer), plus any other species that by itself accounts for at least 20% of the total, as shown in the data forms (Appendix C). All plant species encountered at a sample plot are listed in the data forms, which, when taken together, provide a full picture of the vegetation community.

3.2.4 Determination of Wetland Classifications

Cowardin vegetation class and hydrogeomorphic (HGM) class information are required to determine the functions of wetland and to inform mitigation design if unavoidable impacts on wetland are proposed. Cowardin vegetation class was determined based on the USFWS wetland classification system (Cowardin et al. 1979). HGM class was determined in the field using the guiding document *A Hydrogeomorphic Classification for Wetlands* (Brinson 1993).

3.2.5 Wetland Functional Assessment

Wetland was rated according to the guidelines set forth in the *Washington State Wetland Rating System for Western Washington* (Hruby 2014) (Appendix E). The functional assessment is based on

three major groups of functions that wetland performs: water quality improvement, hydrologic functions, and wildlife habitat. Each function is given equal importance in setting the category for a wetland. The ratings for each function are divided into “site potential,” “landscape potential,” and “value.” The rating for each function can be useful in determining how well a wetland performs each function. The functional analysis informs local wetland buffer requirements and mitigation planning so that wetland creation, restoration, or enhancement areas compensate for the functions specific to the affected wetland. As mentioned previously, this rating is often used by local agencies to determine required buffers.

4.1 Existing Conditions

4.1.1 Project Setting

The East Base bus yard and employee parking lot are located at 1975 124th Avenue NE, Bellevue, WA 98005 (Figure 1). The project site, where construction and operation of the project would occur, is a 262,093-square-foot area within the southeast portion of the East Base bus yard and southwest portion of the employee parking lot (Figure 2). The project site is in Section 28, Township 25N, Range 5E; the central charging station coordinates are 47.626886°, -122.177761°. The King County property parcel number is 2825059026. The project site is in a highly developed setting. Immediately west of the project site is a paved road separating East Base from a large construction site. A tributary to Kelsey Creek (West Tributary) runs northwest to southeast through the project site. A warehouse distribution center owned by Safeway is immediately to the south of the project site.

4.1.2 Critical Area Study Extent

The critical area study extent focused on the project site, as defined above, and the potential critical areas immediately adjacent to the project site (study area; Figure 2). Three potential critical areas were identified during initial project desktop assessment. These adjacent critical areas included the West Tributary and associated wetland running through the project site and steep slopes in the middle, north, and south of the project site.

4.2 Desktop Assessment Results

4.2.1 U.S. Geological Survey Topographic Map

The West Tributary is mapped as a blue line feature at the bottom of the 7.5-minute USGS Kirkland topographic map (USGS 2017a). This feature continues in the 2017 7.5-minute USGS Mercer Island topographic map (USGS 2017b) flowing south into Kelsey Creek, which drains west into Mercer Slough and then into Lake Washington, a Traditional Navigable Waterway.



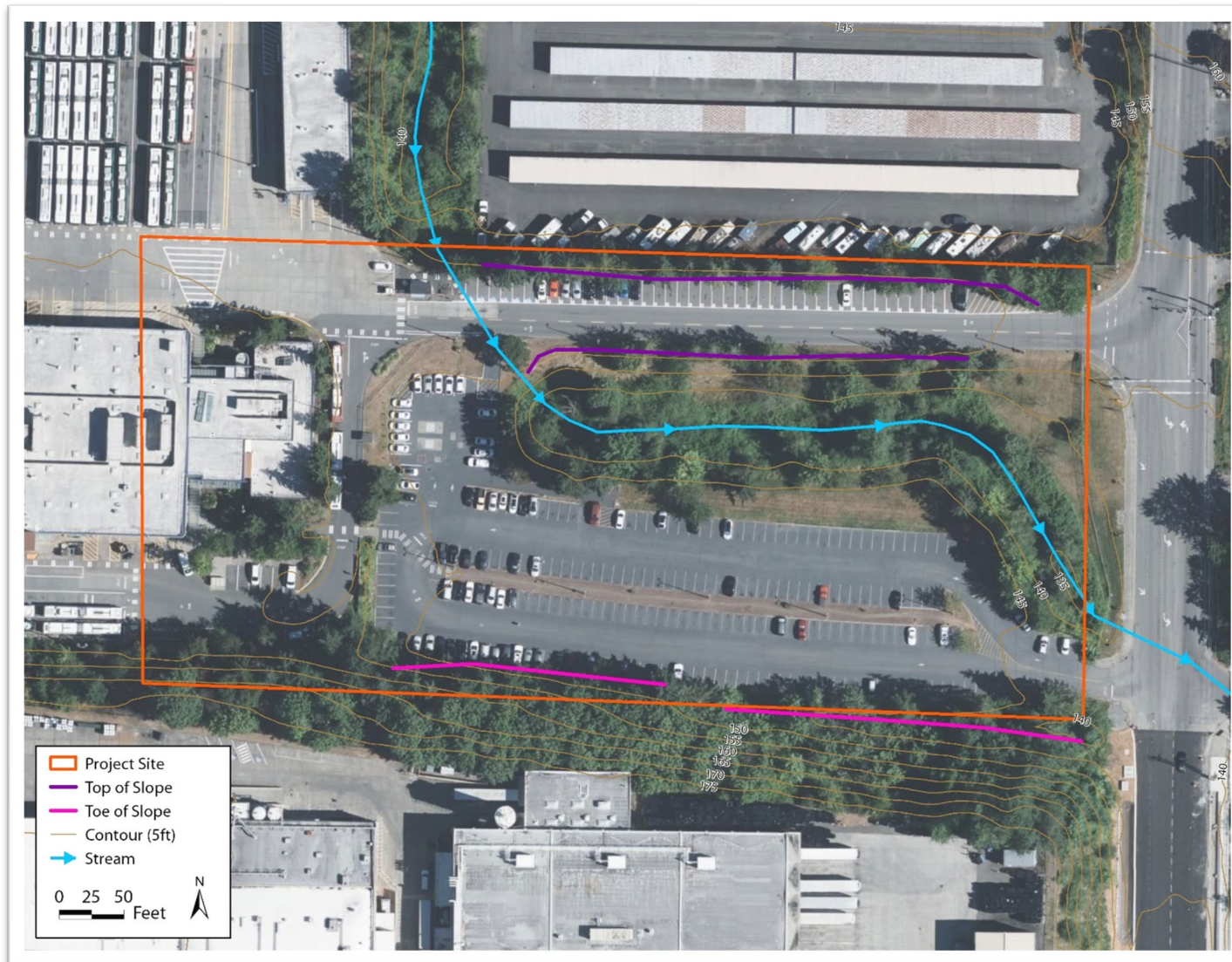


Figure 2. East Base Project Site and Adjacent Critical Areas

4.2.2 Hydrology

The project site is in the Cedar-Sammamish Watershed (Water Resource Inventory Area [WRIA] 8, hydrologic unit code [HUC] 17110012; King County 2020). Historically, this area was almost entirely valley bottom forests with associated floodplain wetland (Collins et al. 2003). Currently, the Kelsey watershed subbasin is largely developed, with 12% remaining as forested and less than 2% as wetland (King County 2018).

The principal hydrological driver within the area is precipitation that drains into the West Tributary from surface or groundwater pathways. Large storm events result in the tributary overtopping and flooding benches along the creek. Runoff from these storm events is likely magnified due to the high concentration of hard surfaces surrounding the creek (USGS 2012). Prior to the field survey, precipitation was normal when compared to historical conditions (Appendix F).

The project site is outside of the 100-year floodplain based on the Federal Emergency Management Agency (1995) *Flood Insurance Rate Map for King County Washington Incorporated Areas*.

4.2.3 Natural Resources Conservation Soil Survey

The project site has two mapped soil units (Appendix B, Figure A). Soil Unit Sk, Seattle Muck, is mapped within most of the project site, which was historically largely a wetland (Landau Associates, Inc. 2001). This soil is found in depressions and formed from grassy organic material. It is frequently flooded, poorly drained, and considered hydric. The southwest corner of the project site is mapped as AmC, Arents, Alderwood material, 6% to 15% slopes. This soil is formed from basal till and found on glacial till plains. It is rarely flooded and is well drained; it is not considered hydric.

4.2.4 Steep Slopes

Steep slopes, or 40% slopes approximately, were observed along the southern and northern boundaries of the project site, as well as on the north side of the West Tributary, adjacent to the bus entry. These areas are also documented in the City of Bellevue Critical Geologic Hazards Map (Appendix B, Figure B) (City of Bellevue 2018b). No slope stability issues or landslide hazards were identified during desktop analysis (King County 2020). A study conducted by Landau Associates, Inc. (2001) determined the native subsurface is glacial till or recessional outwash. During initial development of the property, cuts were made along the southern portion, which may have then been used to raise the northern elevation up to 13 feet. In general, the transition between the cut and fill areas extends diagonally across the site from northwest to southeast (Landau Associates, Inc. 2001). A 1975 report by Converse Davis Dixon Associates, Inc. documented the employee parking area consisted of undisturbed glacial till or recompacted glacial till fill material, which, during lot construction, was to be compacted to a 95% maximum density during grading (Converse Davis Dixon Associates, Inc. 1975). After compaction, the lot was to be overlaid with a 4-inch gravel base, 4 inches of crushed surfacing, and capped with a 2-inch asphaltic concrete surface. Finally, Yard Lighting Replacement – King County Metro East Base report by the Riley Group (2020) found no signs of “rotational failures, tensions cracks, or exposed soil surfaces indicating previous major landslides activities on the slope surface” for the north and southern steep slopes on the western portion of the base (Appendix I, *Geotechnical Report – The Riley Group, 2020*). It is likely the steep slopes identified on the eastern portion of the property would be similarly stable since these areas have undergone similar historical changes (cut and fill).

4.2.4.1 Required Buffers and Structural Setback

Based on City of Bellevue Ordinance Codes discussed in Chapter 2, *Regulatory Framework*, from the toe of slope, a 75-foot setback with no mandatory buffer is required along the southern boundary of the project site. Additionally, a 50-foot buffer from the top of slope with no mandatory setback is required on the northern boundary of the project site (Figure 3). These buffers and structural setbacks are entirely contained within the East Base employee parking areas. As described immediately above, this area has been cut and filled but has also been shown to be stable with no historical evidence of landslides or other geologic instabilities. These buffers are likely to be eligible for exclusion since East Base was initially built in 1977.

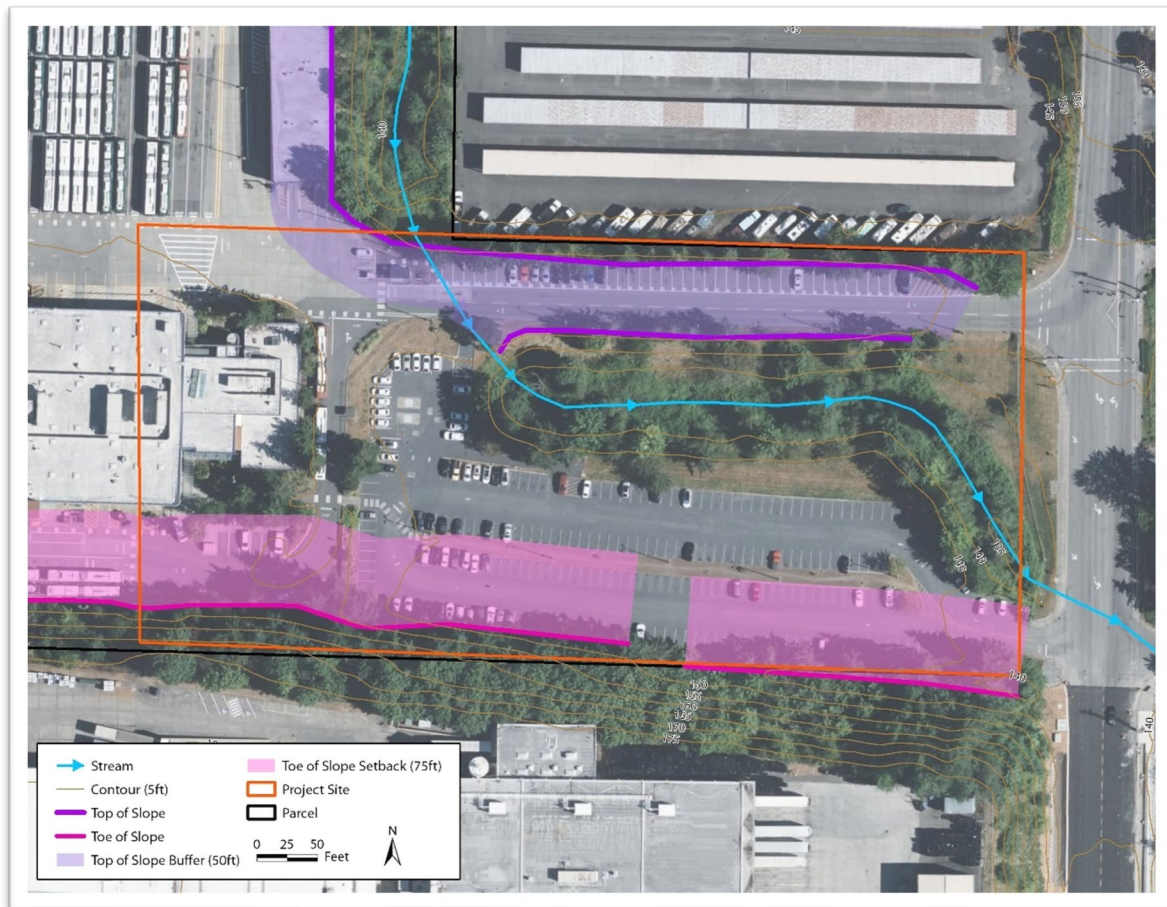


Figure 3. Steep Slopes and Associated Buffers and Setbacks

4.2.5 Wetland and Stream Inventories

The NWI maps the West Tributary as a seasonally flooded scrub-shrub wetland (Appendix B, Figure C). The City of Bellevue maps the West Tributary as a stream in its GIS Streams shapefile (City of Bellevue 2018a). A *West Tributary Habitat Assessment* by Tetra Tech (2016) for the City of Bellevue determined the tributary was an F-type, or fish bearing, for the entire reach. King County iMap (King

County 2020) also documents the West Tributary running northwest to southeast through the project site.

Historically, the entire parcel was a forested wetland with the West Tributary running from the northwest parcel corner through to the southeast. During initial East Base construction, the West Tributary was relocated to its current course to the north within the western portion of the bus yard (Landau Associates, Inc. 2001). During construction of the East Base, the West Tributary was relocated north of its natural course (Appendix B, Figure D). This historical watercourse is also mapped in the King County iMap, Environmentally Sensitive Areas, Streams GIS layer as an unidentified stream (Appendix B, Figure E).

4.2.6 Fish and Wildlife Habitat

The WDFW Priority Habitats and Species map documents resident coastal cutthroat (*Oncorhynchus clarki*) occurring within and migrating through the site (Appendix B, Figure F; WDFW 2020a). WDFW SalmonScape also mapped Chinook (*Oncorhynchus tshawytscha*), coho (*Oncorhynchus kisutch*), and steelhead (*Oncorhynchus mykiss*) accessible habitat in the West Tributary (Appendix B, Figure G; WDFW 2020b²). Although the 2016 *West Tributary Habitat Assessment* also determined the tributary to be appropriate fish habitat, it additionally stated that there was no spawning habitat along the project reach and that habitat quality suffered from a dense reed canary grass (*Phalaris arundinacea*; Tetra Tech 2016). No terrestrial or aquatic invasive species, such as the New Zealand mud snail (*Potamopyrgus antipodarum*), have been documented in the project site and vicinity. Finally, Ecology's *Puget Sound Watershed Characterization Project* notes the watershed basin is important for local salmonid habitat but has poor quality wetland, floodplain, and terrestrial habitats for other wildlife (Appendix B, Figure H; Ecology 2019). According to the Washington Natural Heritage Program (DNR 2019), no threatened or endangered plant species are documented within or near the site.

At the time of the field survey, song sparrow, red-breasted nuthatch, American crow, Anna's hummingbird, American goldfinch, bushtit, ruby-crowned kinglet, golden-crowned kinglet, Bewick's wren, northern flicker, black-capped chickadee, glaucous-winged gull, band-tailed pigeon, pine siskin, and a common raven were observed within the project site (Appendix H). Small woody debris was noted within the streambed with a possible burrow observed within the left bank at the top of the reach (Appendix G). Plant diversity was good within the riparian corridor, with 44 different plant species observed. Of these, 11 plant species are considered weedy or invasive. All tree species documented are likely to have been planted and largely ornamental. Eleven plant species were documented along the southern and northern steep slopes, most in the tree layer and as weedy species in the herb layer (Appendix H). Outside of the riparian corridor and steep slope areas, the project site is almost completely paved, with a small service building and a larger administrative building on site. In summary, although the West Tributary does provide fish habitat, the overall project site habitat potential is low because it is largely developed and used for parking.

² Though Appendix B, Figure G is showing the range for Spring Chinook, this range is identical for Summer and Winter Steelhead, Coho, and Summer Chinook.

4.3 Wetland and Stream Delineation Results

The study area was surveyed November 9, 2020. One wetland unit was identified and the West Tributary OHWM determined. Figure 4 shows the delineated wetland, West Tributary OHWM, and all sample locations (Appendices C and D).



Figure 4. West Tributary OHWM Determination, Wetland Delineation, and Sample Plots

4.3.1 Wetland EBL, PFO1C (0.45 acre)

A hydrologically connected, seasonally flooded freshwater forested scrub-shrub wetland was identified within the study area. The wetland is comprised of a riverine wetland on a low terrace immediately adjacent to the West Tributary to Kelsey Creek and areas of depressional wetland on benches slightly upslope to the north and south. Because these areas are hydrologically connected—water flows in one direction from the upper benches through the lower terrace, either as surface or groundwater, and into West Tributary—they are treated as one wetland unit (Hruby 2014).

4.3.1.1 Vegetation

There are two vegetative communities within the wetland unit. The vegetative community along the lower terrace has an herb layer dominated by reed canary grass and field horsetail (*Equisetum arvense*); the second, on the bench upslope immediately adjacent to or within landscaping, is dominated by Himalayan blackberry (*Rubus armeniacus*) with reed canary grass and ornamental grass dominating the herb layer. The tree layer was dominated by red alder (*Alnus rubra*) and ornamental maples (*Acer* sp.) for both communities.

A weeping willow (*Salix pendulina*) was also observed along the lower terrace in the tree layer, along with bitter nightshade (*Solanum dulcamara*), giant horsetail (*Equisetum telmateia*), duckweed (*Lemna minor*), and watercress (*Nasturtium officinale*) in the herb layer.

Vegetation upslope was dominated by Himalayan blackberry and red osier dogwood (*Cornus alba*) in the shrub layer, with Douglas' Meadowsweet (*Spiraea douglasii*) and vine maple (*Acer circinatum*) observed. The herb layer was dominated by reed canary grass, field horsetail, and ornamental lawn.

All dominant plants were OBL, FAC, or FACW, except the ornamental maple and lawn, which are FACU. Both plant communities meet the Corps' criteria for hydrophytic vegetation based on the dominance test.

4.3.1.2 Soils

As mapped by the NRCS, the lower terrace is comprised of muck, or soils with a high concentration of organic matter that is slowly decomposing (EBL-4 and EBL-8, Black Histic [A3] indicator). A strong sulfur odor was also noted when first digging soil pit EBL-4. The upslope bench was comprised of very dark grayish brown (10YR 3/2) or very dark brown (10YR 2/2) silt loam in the upper layer to gray (10YR 6/1 or 10YR 5/1) silt or sandy loam starting at between 7 to 9 inches below ground surface (bgs). Redox concentrations of at least 3% were observed in the lower layer matrix (EBL-1, EBL-5). These soils meet the hydric soil indicator for Depleted Below Dark Surface (A11) and the Corps' criteria for wetland soils.

4.3.1.3 Hydrology

Hydrology within the wetland is unidirectional and primarily driven through precipitation. Storm events cause the West Tributary to overtop onto the lower terrace and/or produce uphill runoff that settles onto the upslope bench or lower terrace. This water drains into West Tributary either as surface water or groundwater.

Saturation at or above 12 inches was observed in soil pits EBL-4 and EBL-8. These are both primary hydrological indicators and meet the Corps' criteria for wetland hydrology. The secondary indicators of geomorphic position, FAC-neutral test, and drainage patterns were observed in soil pits EBL-1 and EBL-5 and meet the Corps' criteria for wetland hydrology.

4.3.1.4 Adjacent Uplands

Vegetation was dominated by red alder, ornamental maples, and Doug fir (*Pseudotsuga menziesii*) in the tree layer, Himalayan blackberry in the shrub layer, and ornamental lawn, reed canary grass, and giant horsetail in the herb layer. EBL-3, EBL-6, and EBL-7 plots met the Corps' criteria for hydrophytic vegetation based on the dominance test. EBL-6 was a weak red (2.5 YR 5/2) silt loam; redox concentrations were observed only along the northern wall. EBL-2, EBL-3, and EBL-7 had sandy loam with the colors ranging from dark yellowish brown (10YR 4/4), black (5Y 2.5/1), to very dark brown (7.5YR 3/1), respectively, to a minimum depth of 9 inches bgs. A silt loam layer underlaid the sandy loam layer in EBL-2 and EBL-3. In addition, a depleted gray to dark gray matrix (10YR 6/1; 10YR 4/1) with redox concentrations was observed between 11 and 13 inches bgs. However, these depleted layers are located too deep below the surface to be a hydric soil indicator. No surface water, high groundwater table, saturation, or any other primary or secondary hydrological indicators were observed in upland plots.

4.3.1.5 Functional Assessment

To assess the function of the wetland unit, the boundaries were extended outside of the study area to the north-south bend of the creek until it is piped under a parking lot (Figure 4; Appendix C).

Water Quality and Hydrology

The wetland unit has dense vegetation along the lower terrace and is in a highly developed setting, resulting in a moderate to high potential to improve water quality and reduce flooding and erosion. However, since there are no flooding or pollutant problems in the project vicinity, the value to society is low.

Habitat

Although the wetland unit has a good amount of plant diversity and special habitat features, it is also dominated by invasive plant species and isolated in a highly developed setting, so it has limited ability to provide quality habitat within a landscape setting, resulting in a moderate value to society.

Summary

The wetland unit was found to be a Category III due to its moderate to high level of function within an isolated and disturbed setting. Wetland Rating summary calculation provided below:

Improving Water Quality – 6
Hydrologic – 7
Habitat – 5
Total – 18

4.3.1.6 Required Buffers and Structural Setback

Based on City of Bellevue Ordinance Codes discussed in Chapter 2, a Category III wetland with a habitat score of 5 is required to have a 110-foot buffer, with an additional 15-foot structural setback. Any new development or construction must adhere to or mitigate for impacts within these areas. Given East Base was established in 1977, these requirements may exclude the existing footprint (LUC 20.25H.095.D.1.b). Full buffer extent is shown in Figure 5. The northeast wetland boundary, Wetland EB1, and rating are reported in *King County Metro East Base Yard Lighting Replacement Project, Wetland Delineation and Critical Area Report* (ICF 2020). These buffers contain a forested corridor on either side of the wetland, but this is entirely surrounded by a landscaping grass followed by developed areas such as the East Base property, public storage to the east, a steep slope to the north, and 124th Avenue NE to the east. In addition, landscaping grass has been shown to have low habitat potential and a higher runoff coefficient than woodlands or native grasses (ODOT 2005). As a result, most of the buffer and setback provide minimal protection or functional lift in terms of wetland habitat, water quality improvement, or hydrology.



Figure 5. Wetland and Associated Buffers and Setbacks

4.3.2 West Tributary to Kelsey Creek (517 linear feet)

The West Tributary to Kelsey Creek appeared to have a sandy channel bottom ranging from 3 to 9 feet in width through the study area, which extended from the pipe outfall to the culvert running

under 124th Avenue NE. The OHWM and top of bank northwest reach were determined in *King County Metro East Base Yard Lighting Replacement Project, Wetland Delineation and Critical Area Report* (ICF 2020). An outfall pipe, connecting to the West Tributary upstream, flows into a large pool at the top of the creek reach (OHWM-4). An additional outflow with an associated disbursement pad was observed above the pool on the right bank. A small spillover channeling the flow and increasing channel depth was observed immediately downstream of the pool (OHWM-3; Appendix G). Downstream from the pool, OHWM follows the same elevation as the riverine wetland along portions of the left bank (EBL-4, OHWM-1). In general, OHWM was determined by change of vegetation, from reed canary grass to Himalayan blackberry, and a break in the topography (or toe of slope). OHWM was also determined by undeveloped soil profiles, incised banks, scour lines, aquatic vegetation, and flattened vegetation below OHWM; soil high in organic matter, sediment deposits, stain lines, and exposed roots along OHWM; and mineral soils with lighter or no staining above OHWM.

4.3.2.1 Required Buffers and Structural Setback

Based on City of Bellevue Ordinance Codes discussed in Chapter 2, *Regulatory Framework*, all new construction on developed or undeveloped areas along the West Tributary, Kelsey Basin are required to have a 50-foot buffer from the top of bank with an additional 20-foot structural setback from the buffer (Figure 6). As part of the permitting process, any development within these areas must mitigate for possible impacts from the proposed project. This buffer lays almost entirely within the East Base employee parking area and provides minimal wildlife habitat or hydrological improvements to the West Tributary.

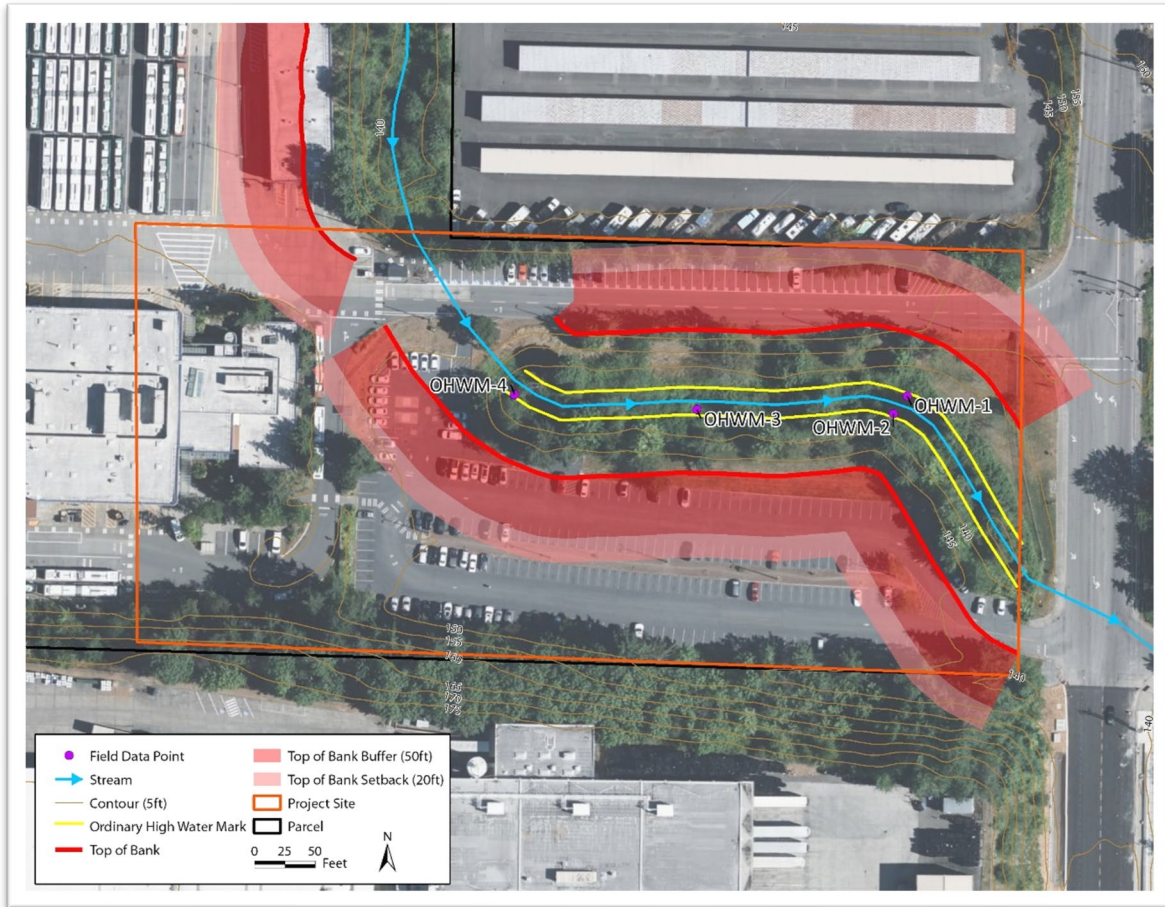


Figure 6. West Tributary to Kelsey Creek and Associated Buffers and Structural Setbacks

4.4 Limitations

The results and conclusions expressed herein represent ICF's professional judgment based on the information available; no other warranty, expressed or implied, is made. Final determinations for wetland boundaries and categories are the responsibility of the regulating resource agencies. Wetland boundaries can be altered by changes in land use, hydrology, or climate. If a physical change occurs in the basin, or if 3 to 5 years pass before the project is constructed, another wetland delineation should be conducted.

Chapter 5

Application of City of Bellevue Regulations

The proposed project would require addressing the application of the City of Bellevue Critical Area Ordinance code, specifically, as follows.

5.1 LUC 20.25H.075.C.1.c: Designation of Critical Areas and Buffers, Streams, West Tributary, Kelsey Basin

General performance standards outlined in LUC 20.25H.080 would be followed and are listed below. Mitigation through avoidance and minimization of impacts on the West Tributary would be accomplished by design measures discussed in Chapter 6, *Project Alternatives, Impacts, and Mitigation Sequencing*, Section 6.6, *Mitigation Sequencing* (LUC 20.25H.085). In addition, the required setback for open waterways may be modified in developed areas if the project would not affect stream function or habitat (LUC 20.25H.075.D.4).

LUC 20.25H.080 Performance Standards—Streams

Development on sites with a Type S or F stream or associated critical area buffer shall incorporate the following performance standards in design of the development, as applicable.

1. *Lights shall be directed away from the stream.*

The project would not increase light within the project site and vicinity.

2. *Activity that generates noise such as parking lots, generators, and residential uses shall be located away from the stream or any noise shall be minimized through use of design and insulation techniques.*

Construction noise would be temporary and would result from the use of vehicles and equipment. Construction noise would occur during the regularly permitted hours for construction within the city limits of Bellevue outlined in the Bellevue City Code (BCC 9.18). Once construction is completed, operation noise from electric vehicle charging stations would be minimal and compatible with the surrounding urban setting.

3. *Toxic runoff from new impervious area shall be routed away from the stream.*

The project would not generate toxic runoff. Runoff, including stormwater, would continue to be either drained via existing storm drains onsite, or collected and disposed of at permitted facilities.

4. *Treated water may be allowed to enter the stream critical area buffer.*

No water used or encountered during construction would drain below the OHWM of the West Tributary. Any slurry produced by directional boring would be removed by methods such as using a vacuum truck and taken to a permitted facility for treatment and disposal. Water encountered during construction would be collected and pumped into a settling drum allowing

particulates to settle out prior to discharging into the existing City stormwater system per a project-specific dewatering plan included in the Stormwater Pollution Prevention Plan (SWPPP). Stormwater drains associated with the stormwater conveyance system may be within the southern portion of top of bank or wetland buffer (in the employee parking lot). However, this conveyance system is isolated from, and would not drain into, the West Tributary of Kelsey Creek.

Otherwise, project operation would not generate treated water. No new additional stormwater treatment facilities are proposed.

5. The outer edge of the stream critical area buffer shall be planted with dense vegetation to limit pet or human use.

The project site stream buffer already comprises dense vegetation. The project would not remove or degrade riparian vegetation.

6. Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the stream critical area buffer shall be in accordance with the City of Bellevue's "Environmental Best Management Practices," now or as hereafter amended.

The project would be contained within a parking strip capped island with minimal vegetation and within an existing landscaped area surrounded by pavement. The project would not increase the current use of pesticides, insecticides, and fertilizers.

7. All applicable standards of Chapter 24.06 BCC, Storm and Surface Water Utility Code, are met.

The project would meet all applicable standards of Chapter 24.06 BCC, Storm and Surface Water Utility Code.

5.2 LUC 20.25H.095.D.1.b: Designation of Critical Areas and Buffers, Wetlands, Buffers and Setbacks on Sites with Existing Development

Buffer averaging was used to adjust the 2,126 square feet of buffer and corresponding setback outside the project site and extend it across the southeast. This adjustment does not reduce the southern portion of the wetland buffer width to less than 75% of the required buffer dimension (Figure 7). The total buffer area would not be reduced and would remain contiguous. The adjustment or compensating area would not affect slope stability and would not increase the likelihood of erosion or landslide hazard, because the project would remain outside of the steep slopes identified in Chapter 4, *Results*, Section 4.2.4, *Steep Slopes*. The ecological structure and function of the resulting buffer surrounding the wetland would remain similar to the existing condition, with no significant adverse impacts on existing habitat associated with species of local importance (Figure 7; LUC 20.25H.095.D.2.a).

LUC 20.25H.095.D.2.a.i states, "Buffer averaging may be approved only if the applicant demonstrates that a modification to non-critical area setbacks pursuant to LUC 20.25H.040 would not accommodate the proposed development in a manner consistent with its intended use and function". This regulation largely applies to residential properties noting maximum adjustments for front, side, and rear yards and is not applicable to the project (20.25H.040.B). The project in its

entirety would be more than 6 feet away from the nearest structure. Project structures have been designed to minimize their footprint in relation to critical areas, buffers, and setbacks (Chapter 6, *Project Alternatives, Impacts, and Mitigation Sequencing, Section 6.6.1, Avoidance Measures*). General performance standards outlined in LUC 20.25H.100 would be followed and are outlined below.

LUC 20.25H.100 Performance Standards—Wetlands

Development on sites with a wetland or wetland critical area buffer would incorporate the following performance standards in design of the development, as applicable.

1. *Lights shall be directed away from the wetland.*

The project would not increase light within the project site and vicinity.

2. *Activity that generates noise such as parking lots, generators, and residential uses shall be located away from the wetland, or any noise shall be minimized through use of design and insulation techniques.*

Construction noise would be temporary and would result from the use of vehicles and equipment. Construction noise would occur during the regularly permitted hours for construction within the city limits of Bellevue outlined in the Bellevue City Code (BCC 9.18). Once construction is completed, operation noise from electric vehicle charging stations would be minimal and compatible with the surrounding urban setting.

3. *Toxic runoff from new impervious area shall be routed away from the wetlands.*

The project would not generate toxic runoff. Runoff, including stormwater, would continue to be either drained via existing storm drains onsite, or collected and disposed of at permitted facilities.

4. *Treated water may be allowed to enter the wetland critical area buffer.*

No water used or encountered during construction would drain into the wetland critical area. Any slurry produced by directional boring would be removed by methods such as using a vacuum truck and taken to a permitted facility for treatment and disposal. Water encountered during construction would be collected and pumped into a settling drum allowing particulates to settle out prior to discharging into the existing City stormwater system per a project-specific dewatering plan included in the Stormwater Pollution Prevention Plan (SWPPP). Stormwater drains associated with the stormwater conveyance system may be within the southern portion of top of bank or wetland buffer (in the employee parking lot). However, this conveyance system is isolated from, and would not drain into, the wetland or wetland critical area buffer.

Otherwise, project operation would not generate treated water. No new additional stormwater treatment facilities are proposed.

5. *The outer edge of the wetland critical area buffer shall be planted with dense vegetation to limit pet or human use.*

The project site wetland buffer already comprises dense vegetation. The project would not remove or degrade wetland vegetation.

6. *Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the stream buffer shall be in accordance with the City of Bellevue's "Environmental Best Management Practices," now or as hereafter amended.*

The project would be contained within a parking strip capped island with minimal vegetation and within an existing landscaped area surrounded by pavement. The project would not increase the current use of pesticides, insecticides, and fertilizers.

7. *All applicable standards of Chapter 24.06 BCC, Storm and Surface Water Utility Code, are met. (Ord. 6417, 5-21-18, § 34; Ord. 5680, 6-26-06, § 3) Development is designed to minimize impervious surfaces within critical areas and buffers.*

The project would meet all applicable standards of Chapter 24.06 BCC, Storm and Surface Water Utility Code. (Ord. 6417, 5-21-18, § 34; Ord. 5680, 6-26-06, § 3). The proposed project footprint is not located in any critical areas or buffers, and therefore the proposed project footprint would not increase impervious surfaces in these areas.



Figure 7. Wetland Buffer Averaging During Construction (Adjustment Outlined in Black within Buffer)

5.3 LUC 20.25H.120.A.2: Designation of Critical Areas and Buffers, Geologic Hazard, Steep Slopes

Performance standards outlined in LUC 20.25H.125 would be followed as part of the project and are discussed below. Specifically, the project would avoid alterations to the current slope contour and elevation. Avoidance and minimization measures are further discussed in Chapter 6, *Project Alternatives, Impacts, and Mitigation Sequencing*, Section 6.6, *Mitigation Sequencing*. The required toe of slope setback may be modified if shown the project would not increase geological hazards during construction or the life of the project (LUC 20.25H.120.C.3).

LUC 20.25H.125 Performance Standards—Steep Slopes

1. *Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography.*

Trenching and directional boring for conduit installation would be returned to preconstruction conditions with the same final elevation and contour. Transformer, EV parking signs, bollards, handholes, charger stations, and charger station provisions would be installed on flat terrain.

2. *Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation.*

No ground-disturbance activity would occur within the top or toe of steep slopes. Vegetation disturbance would be limited to scattered grass patches within pebble groundcover of the parking island, and near the handhole at the southeast corner of the vehicle maintenance and operations building landscaping. The landscaping area is located in previously disturbed area and is surrounded by existing pavement. Plantings impacted will be restored to original or better condition.

3. *The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties.*

The project would remain outside of steep slopes and would not increase risk or require an increased buffer on neighboring properties.

4. *The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes where graded slopes would result in increased disturbance as compared to use of retaining wall.*

The project would not require construction of graded artificial slopes or retaining walls.

5. *Development shall be designed to minimize impervious surfaces within the critical area and critical area buffer.*

The proposed project footprint is not in any critical areas or buffers; therefore, it would not increase impervious surfaces in these areas.

6. *Where change in grade outside the building footprint is necessary, the site retention system should be stepped and regrading should be designed to minimize topographic modification. On slopes in excess of 40 percent, grading for yard area may be disallowed where inconsistent with this criteria.*

Regrading would not be required for construction or operation of the project. Trenching and directional boring for conduit installation would be returned to preconstruction conditions with the same final elevation and contour. The Transformer, EV parking signs, bollards, handholes, charger stations, and charger station provisions would be installed on flat terrain.

7. *Building foundation walls shall be utilized as retaining walls rather than rockeries or retaining structures built separately and away from the building wherever feasible. Freestanding retaining devices are only permitted when they cannot be designed as structural elements of the building foundation.*

The project would not require a building foundation wall.

8. *On slopes in excess of 40 percent, use of pole-type construction which conforms to the existing topography is required where feasible. If pole-type construction is not technically feasible, the structure must be tiered to conform to the existing topography and to minimize topographic modification.*

The project would not be constructed on slopes in excess of 40%. Trenching and directional boring for conduit installation would be returned to preconstruction conditions with the same final elevation and contour. The Transformer, EV parking signs, bollards, handholes, charger stations, and charger station provisions would be installed on flat terrain.

9. *On slopes in excess of 40 percent, piled deck support structures are required where technically feasible for parking or garages over fill-based construction types.*

The project would not be constructed on slopes in excess of 40%. Trenching and directional boring for conduit installation would be returned to preconstruction conditions with the same final elevation and contour. The Transformer, EV parking signs, bollards, handholes, charge stations, and charger station provisions would be installed on flat terrain.

10. *Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210. (Ord. 5680, 6-26-06, § 3).*

Trenching and directional boring for conduit installation would be returned to preconstruction conditions elevation and contour. The Transformer, EV parking signs, bollards, handholes, charger stations, and charger station provisions would be installed on flat terrain previously compacted and overlaid with a gravel base and crushed surfacing (Converse Davis Dixon Associates, Inc. 1975). Compacted gravel, in parking lots and roads, is typically designed to withstand heavy loads and form a seal shown to have low permeability and only a slight reduction in runoff when compared to paved surfaces (Wilson 2014). Therefore, though the new permanent structures with a footprint of approximately 57 square feet would be constructed, infiltration in the cap island area would be similar to existing conditions. The one handhole located in the landscaped area southeast of the vehicle maintenance and operations building would result in approximately 1 square foot of new hard surface. Given the size of the area, this additional impervious surface should be considered de minimis. The surrounding disturbed landscaped area would be restored to preconstruction condition or better.

The East Base likely qualifies for a wetland and steep slope exclusion of buffers and setbacks from the perimeter cement curb inward toward the established parking areas and operations and maintenance building (Figure 8) (LUC 20.25H.095.D.1.b and LUC 20.25H.120.B.2, respectively).

Therefore, modification of the required buffers and setbacks under the City of Bellevue Critical Area Ordinance code for wetland and steep slopes may not be required.



Figure 8. Temporary Impacts During Construction (with Buffer and Setback Exclusions)

Chapter 6

Project Alternatives, Impacts, and Mitigation Sequencing

6.1 Alternative Analysis

As part of construction design, four alternatives were considered to address the project goals and purpose and limit impacts on critical areas: 1) a no-build option; 2) southeast corner of the vehicle maintenance and operations building; 3) immediately east of the vehicle maintenance and operations building; and 4) the proposed project.

1. **No Build.** A no-build alternative was considered nonviable since it would not address the project purpose.
2. **Southeast corner of the vehicle maintenance and operations building.** This alternative includes three charger station provisions for three future charger stations immediately southeast of the vehicle maintenance and operations building. Power would be routed from the rooftop electrical room, through the building with trenching from the building to the sidewalk edges and directly to the charger station provisions. The project would be within the toe of slope setback. This alternative was considered nonviable since the rooftop electrical room did not have the required capacity for the charger station provisions. In addition, the proposed project site may instead be utilized for future ADA parking stalls.
3. **Immediately east of the vehicle maintenance and operations building.** This alternative includes six charger station provisions with three future charger stations located in the employee parking lot immediately east of the vehicle maintenance and operations building. Power would be routed from the rooftop electrical room to a utility pole via overhead routing in the parking lot. Trenching would connect the power from the utility pole to the transformer and then charger station provisions. This alternative was rejected for several reasons:
 - Proximity to the West Tributary, associated wetland, and buffers. A substantial grade change is located immediately to the west of the proposed charger stations and would require construction of a retention wall.
 - The overhead power line would not have the required capacity for the charger station provisions.
 - Trenching across bus lanes would be necessary to connect power from the vehicle maintenance and operations building to the proposed charger stations, thus interfering with bus operations. There are also numerous underground utilities and storm retention tanks near the proposed work area, complicating construction.
 - Traffic rerouting for construction on 124th Avenue NE would likely have affected project construction.
4. **The proposed project.** This alternative includes three charger stations and five charger station provisions located in the southwest employee parking lot. This alternative provides for up to eight charger stations in one parking location, so this alternative simplifies power system design

and lowers design cost. The existing surrounding parking lot provides a barrier between the proposed project and critical areas. The proposed project would be within the toe of slope setback. Two EV parking signs, one charger station and one charger station provision would be within the top of bank setback; use of minimization measures, such as directional boring, would be utilized to reduce impacts to this area. This alternative was deemed the preferred design alternative by King County Metro Transit. A full description of this alternative is provided in Chapter 1, *Introduction*, Section 1.2, *Project Description*.

6.2 Temporary Impacts

No temporary filling, dredging, or discharge into the West Tributary or associated wetland would occur as part of the project construction. Wetland buffer averaging was utilized so the Wetland EBL buffer and setback do not overlap the proposed project ground disturbance (Figure 7). Temporary ground-disturbance work would overlap the top of bank setback (the possible excavation for two EV parking signs and conduit connection to EV-3 and EV-4) and toe of slope setback. The current construction design for EV parking sign requires either a pedestal mount to existing curb, or a post with a footprint of 1 square foot and a concrete foundation of 2 feet bgs. Figure 9 provides a closer view of ground-disturbance locations in relation to critical area boundaries, buffers, and setbacks.

During construction, various activities requiring excavation and soil stockpiling could temporarily reduce soil stability or increase the potential for soil erosion. These activities would include trenching and directional boring for installation of EV parking signs, bollards, conduits, three handholes, concrete footings for pedestal-mounted electric vehicle charger stations and provisions for future charger stations, and a concrete pad supporting an outdoor protective enclosure, which contains a transformer, an electrical panel, and a disconnect.

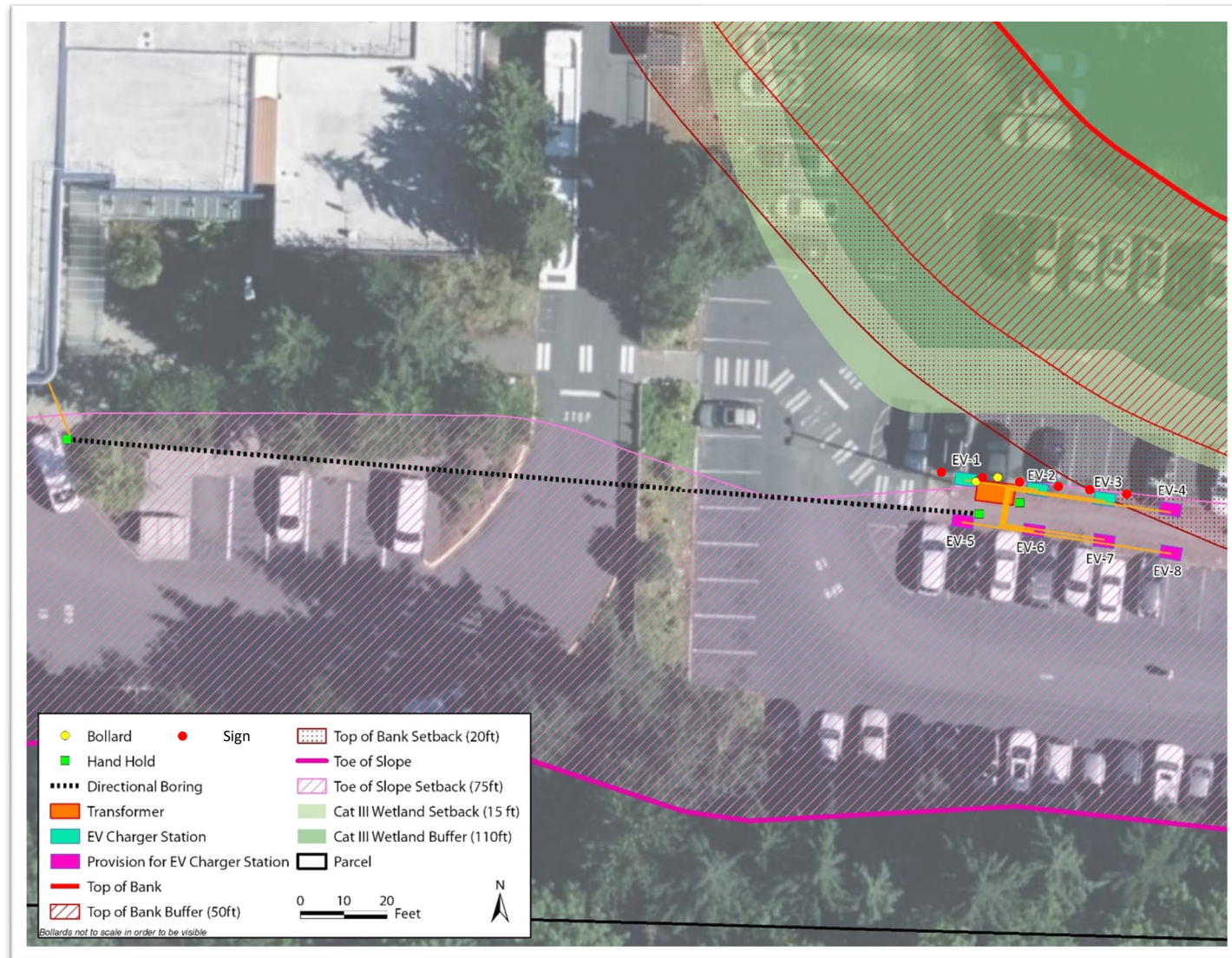


Figure 9. Temporary Impacts During Construction (No Buffer and Setback Exclusions)

6.3 Permanent Impacts

During operations, the EV parking signs, bollards, concrete pad, transformer, disconnect, electrical panel, handholes, and pedestal-mounted electric vehicle charger stations and provisions for future charger stations would not affect air quality or create emissions. Vehicular emissions would also not increase during operation of the project. Rather, vehicular emissions are likely to be reduced from the increased use of electric vehicles. Operation of new pedestal-mounted electric vehicle charger stations would not result in any permanent filling, dredging, or discharge into the West Tributary or associated wetland. The project would remain outside the top of bank, but two EV parking signs, one pedestal-mounted electric vehicle charger station, EV-3, and one provision for pedestal-mounted electric vehicle charger station, EV-4, would be within the top of bank setback. Operation of the project would not result in any permanent impact on steep slopes within or adjacent to the property. The four new EV parking signs, three handholes, concrete pad, the outdoor enclosure containing transformer, disconnect, electrical panel, two pedestal-mounted electric vehicle charger stations and five provisions for future charger stations would be within the toe of slope setback. Two EV parking signs, two bollards, and one electric vehicle charger station, EV-1, would be outside the toe of slope setback. Buffer averaging was used to shift the wetland buffer and setback slightly north; therefore, the project would remain outside of any Wetland EBL buffer and setback (Figure 10). See Figures 11 and 12 for a detailed view of the locations of new aboveground structure (i.e., the Transformer, EV parking signs, bollards, handholes, pedestal-mounted electric vehicle charger stations, and provisions) in relation to critical area boundaries, buffers, and setbacks with and without buffer and setback exclusions (LUC 20.25H.095.D.1.b and LUC 20.25H.120.B.2, respectively).

6.3.1 New Permanent Structures

Only new aboveground structures were considered as permanent impacts, since trenching and directional boring for conduit installation would be returned to preconstruction conditions with the same final elevation and contour. Based on City of Bellevue designation for critical areas (20.25H), two EV parking signs, one pedestal-mounted electric vehicle charger station - EV-3 - and one provision for pedestal-mounted electric vehicle charger station - EV-4 - would be within the top of bank setback for West Tributary to Kelsey Creek (LUC 20.25H.075). The four new EV parking signs, three handholes, concrete pad, outdoor enclosure containing transformer, disconnect, electrical panel, two pedestal-mounted electric vehicle charger stations and five provisions for future charger stations would be within the toe of slope setback if the exclusion is not applicable. Two EV parking signs, two bollards, and one electric vehicle charger station, EV-1, would be outside of the toe of slope setback.

As previously mentioned, the current construction design for EV parking sign requires either a pedestal mount to existing curb, or a post with a footprint of 1 square foot and a concrete foundation of 2 feet bgs. Each new pedestal-mounted electric vehicle charger station would sit inside a footprint of less than 1 square foot and would be approximately 6 feet tall, with a concrete foundation of 4 feet bgs. The provisions for future charger stations would only include the concrete foundation of 4 feet bgs, with conduits wired for future pedestal-mounted electric vehicle charger installation. The transformer, electrical panel, and disconnect would be encased inside an outdoor protective enclosure, which would be bolted to the concrete pad, and the dimensions of the enclosure would be

72 inches long, by 40 inches wide, by 88 inches tall. The transformer, electrical panel, and disconnect, while located inside the outdoor enclosure, would also be bolted to the concrete pad and would have no foundation of their own. The concrete pad itself may have a depth of up to 1-foot bgs. The bollard used to protect the electric vehicle chargers has a foundation with dimensions of 2 feet long and 2 feet wide and may require excavation of up to 4 feet bgs.

These structures would replace approximately 57 square feet of mostly pebble groundcover with a concrete pad, EV parking signs, bollards, handholes, and electric vehicle charger-associated foundations. This increased hard surface area would be 0.008% of the parcel area, which is small in comparison to the remainder of the project site and surrounding area, which are highly developed. In addition, the concrete pad, EV parking signs, bollards, handholes, and charger station foundations would be installed on flat terrain previously compacted and overlaid with a gravel base and crushed surfacing (Converse Davis Dixon Associates, Inc. 1975). As mentioned previously, compacted gravel has been shown to have little permeability and only slightly less runoff when compared to paved surfaces (Wilson 2014). Therefore, the new permanent structures would not result in significantly lower infiltration rates than existing conditions, and stormwater would drain via existing stormwater infrastructure onsite. The project also requires a handhole to be located in the landscaped area southeast of the vehicle maintenance and operations building. However, since the handhole would only have a footprint of approximately 1 square foot, and the surrounding disturbed landscaped area would be restored to preconstruction condition or better, the impact of the added 1 square foot impervious surface area should be de minimis.



Figure 10. Wetland Buffer Averaging During Operation (Adjustment Outlined in Black within Buffer)

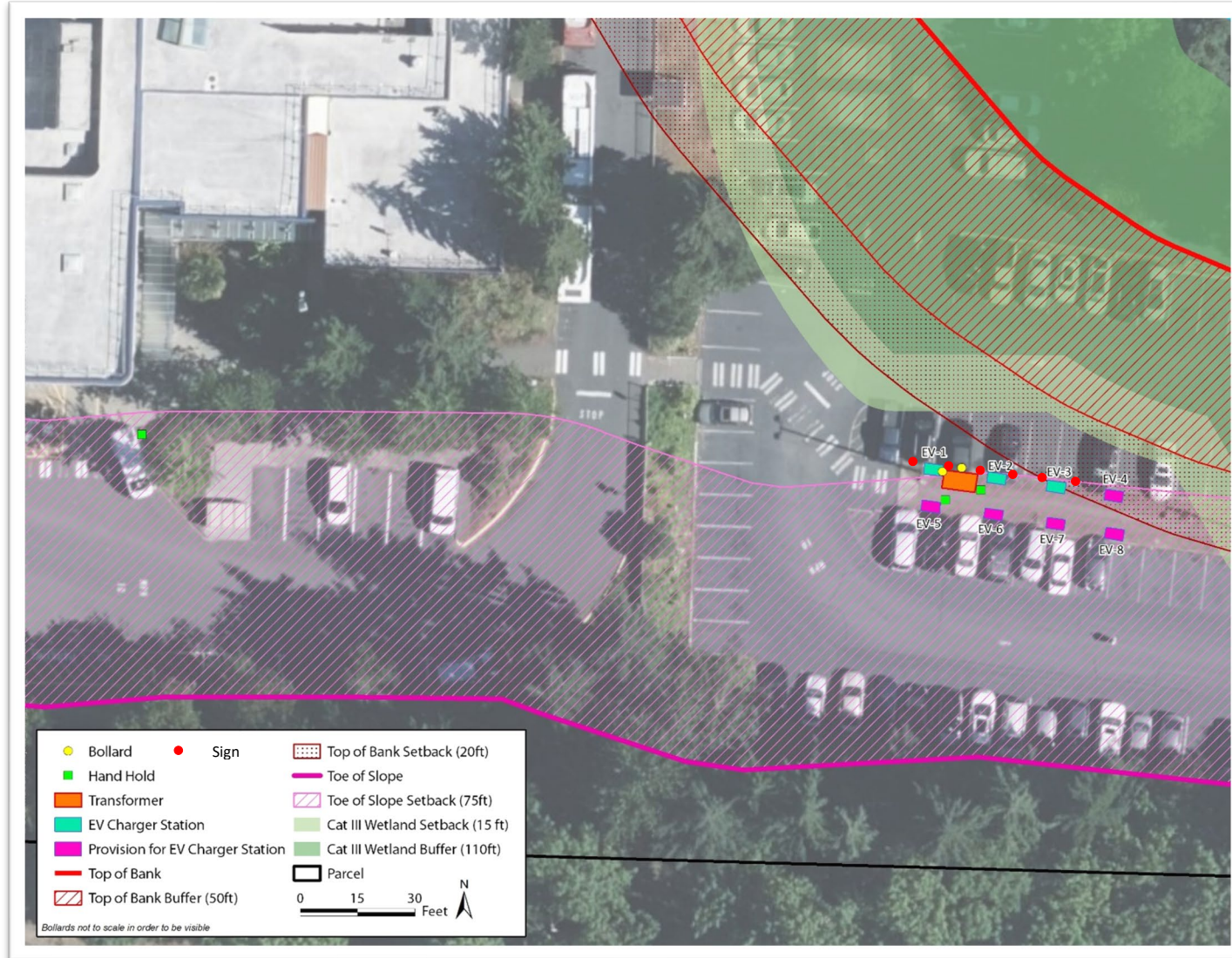


Figure 11. Permanent Impacts During Operation (No Buffer and Setback Exclusions)



Figure 12. Permanent Impacts During Operation (with Buffer and Setback Exclusions)

6.4 Cumulative Impacts

Per City of Bellevue LUC 20.25H.250.B.4, cumulative impacts from the project were considered. The project would have no impact on steep slopes, the West Tributary, and the associated wetland due to new aboveground structures. The new aboveground structures would be relatively small and most of them would be in a nonvegetated area. The new structures would not significantly increase the total hard surface area, especially when compared to the remainder of the project and surrounding area, which are highly developed and largely comprise impervious surfaces. In addition, the EV parking signs, bollards, concrete pad, handholes, and charger station foundations would be installed mostly on flat terrain previously compacted and overlaid with a gravel base and crushed surfacing (Converse Davis Dixon Associates, Inc. 1975). As mentioned previously, compacted gravel has been shown to have little permeability and only slightly less runoff when compared to paved surfaces (Wilson 2014). Therefore, the new permanent structures would not result in significantly lower infiltration rates than existing conditions, and stormwater would drain via existing stormwater infrastructure onsite. Although the project requires a handhole to be installed in the landscaped area southeast of the vehicle maintenance and operations building, the handhole would only have a footprint of approximately 1 square foot, and the surrounding disturbed landscaped area would be restored to preconstruction condition or better. The impact of the added 1 square foot impervious surface area thus should be de minimis. Finally, the result of the project would increase the use of electric vehicles, thereby reducing greenhouse gas emissions and slowing the negative impacts from climate change.

6.5 Impacts on Critical Area Buffers and Setbacks

Currently, the West Tributary to Kelsey Creek buffers and setbacks are fully contained within the East Base parking areas. This paved surface does not provide any habitat or hydrological protection or benefit to the waterway. Similarly, the wetland buffer is largely within a highly developed setting providing minimal protection or functional lift for wetland habitat, hydrology, or water quality. The non-adjusted wetland buffer within the construction area comprises pebble groundcover and grass patches, which have no habitat potential and a higher runoff coefficient than woodlands or native grasses. In addition, construction and operation of the project would occur within an area of the wetland buffer that has previously been developed (Converse Davis Dixon Associates, Inc. 1975). These buffer functions are unlikely to improve or change over the life of the project. While project operation would not greatly improve the riparian corridor, project impacts, due to new permanent structures, would be reduced through application of performance standards as discussed in Chapter 5, *Application of City of Bellevue Regulations*.

Although steep slope setback is likely to be excluded based on LUC 20.25H.120.B.2, this setback—75 feet from the toe of slope—would be fully contained within East Base parking areas. This paved area is level and has been historically stable with no reported landslides, slumping, or other geologic instability.

6.6 Mitigation Sequencing

Potential impacts from construction and operation of the project have been considered during the project design process. Any impacts that cannot be avoided, addressed by construction design, or minimized from best management practices would require further mitigation. The subsections below discuss mitigation sequencing of temporary and permanent impacts through avoidance, minimization, and—if necessary—compensatory mitigation as required under LUC 20.25H.215.

6.6.1 Avoidance Measures

The below section discusses the avoidance measures that would be applied to the project during mitigation sequencing.

6.6.1.1 Temporary Impacts

The project is designed to avoid any construction activities below the OHWM of the West Tributary. No in-water work or work within the wetland footprint is required or would occur during project construction or operation. No ground-disturbing activities would occur within the top or toe of steep slopes. Laydown construction zones would be kept to the paved parking area. All construction would be contained to the East Base paved or landscaped areas. Designated access routes would be used to stay on paved surfaces and avoid soil compaction.

6.6.1.2 Permanent Impacts

The project is designed to avoid any operation activities below the OHWM of the West Tributary, within the wetland footprint, or top or toe of steep slopes.

New Permanent Structures

Avoidance measures would be applied during design to reduce permanent impacts from the new permanent structures. Project placement and operation of pedestal-mounted chargers and provisions, EV parking signs, bollards, three handholes, an electrical panel, a transformer, a disconnect, and a concrete pad would be outside any critical area boundary or buffer. The project would not alter the contour of any existing slopes on site, and contractors should return any disturbed areas to preconstruction conditions. The project placement was designed to avoid any increased geological hazards or impacts on the West Tributary or associated wetland in the project site or on the surrounding area.

Located outside the adjusted wetland buffer and setback, with the exception of one handhole, most of the new permanent structures would be within a landscaped cap island, which has low habitat potential and moderate runoff coefficient. Wetland and buffer functions are unlikely to be affected by the new permanent structures and improve or change over the life of the project. The permanent impact caused by the one handhole in the landscaped area southeast of the vehicle maintenance and operations building will be addressed in Section 6.6.2, *Minimization Measures*.

6.6.2 Minimization Measures

The below section discusses the minimization measures that would be applied to the project during mitigation sequencing.

6.6.2.1 Temporary Impacts

Minimization measures would be applied during construction to reduce temporary impacts from the project. The project would result in minimized adverse impacts on critical areas and buffers through consideration of construction equipment, methods, and timing. Ground disturbance due to trenching for conduits would be minimized as much as possible through the use of directional conduit boring, which would run between a handhole in the landscaped area southeast of the vehicle maintenance and operations building and a handhole near the outdoor-rated enclosure for the Transformer. Existing vegetation would be preserved to the extent practicable.

Prior to project construction, the contractor would provide a project-specific SWPPP to reduce or control erosion that might otherwise occur during ground-disturbing activities. Best management practices and temporary erosion and sediment control (TESC) measures identified in the SWPPP would be followed to control the risk of erosion. In addition, existing vegetation would be preserved to the extent practicable. Erosion control and SWPPP practices would ensure no stormwater discharges or no erosion enters into Wetland EBL or West Tributary to Kelsey Creek. The SWPPP would include a dewatering plan to address the risk of contaminating groundwater, if encountered.

Soil disturbance would occur on flat terrain with some existing vegetation within compacted glacial till or fill material. Existing vegetation would be restored to preconstruction condition and best management practices along with TESC measures would be implemented.

Groundwater, estimated to be approximately 10 feet bgs in some areas of the project site, should not be encountered during installation of EV parking signs, bollards, handholes, the Transformer, pedestal-mounted electric vehicle charger stations or provisions, and conduits since the maximum excavation depth would be only 4 feet bgs. If groundwater is encountered during excavation, it would be collected and pumped into a settling drum allowing particulates to settle out prior to discharging into the existing storm conveyance system. Directional boring for conduit installation could be up to 20 feet bgs. Any slurry produced by directional boring would be removed by methods such as using a vacuum truck and taken to a permitted facility for treatment and disposal. Finally, there is a potential contamination risk to groundwater quality from accidental release or exposure to gasoline, oil, hydraulic fluids, and related materials during the use and operation of construction equipment. This risk would be mitigated through best management practices for accidental leaks from construction equipment during construction.

Fugitive dust emissions may also occur because of clearing, excavating, and other construction activities. Potential for fugitive dust emission would be higher during dry, warm weather conditions when wind and construction equipment create more dust. Areas of ground disturbance would be watered as necessary to reduce fugitive dust.

Emissions from construction vehicles and equipment may temporarily affect local air quality during construction of the project. The emission quantities have not been estimated; however, they are not expected to exceed local emissions standards. The project would address and reduce air quality impacts by implementing measures such as covering loads, installing, and maintaining construction area entrances and exits, and performing proper vehicle maintenance.

6.6.2.2 Permanent Impacts

The below discussion summarizes minimization measures that would be applied during the placement of the new permanent structures.

New Permanent Structures

The new permanent structures within the top of bank setback of Kelsey Creek and toe of slope setback would be compliant with City of Bellevue performance standards listed in Chapter 5, *Application of City of Bellevue Regulations* (LUC 20.25H.080.A, LUC 20.25H.100, and LUC 20.25H.125). The new permanent structures, two EV parking signs, EV-3 and EV-4, within the West Tributary to Kelsey Creek top of bank setback would be surrounded by pebble groundcover and grass patches, which would provide no riparian or aquatic habitat, hydrological protection, or benefit to the waterway.

Placement of new permanent structures was designed to minimize increased hard surfaces. The project placement would be on level terrain within an area previously compacted and overlaid with a gravel base and crushed surfacing (Converse Davis Dixon Associates, Inc. 1975). Therefore, though the new permanent structures are estimated to increase hard surfaces by approximately 57 square feet from pebble to a concrete pad, two handholes, EV parking signs, bollards, or electric vehicle charger-associated foundations or provisions, due to the previous development and the existing substrate and estimated infiltration rate, infiltration in the project footprint would be similar to existing conditions and unlikely to increase geological instability. In addition, although the project requires one handhole to be located in the landscaped area southeast of the vehicle maintenance and operations building, the handhole would only have a footprint of approximately 1 square foot, and the surrounding disturbed landscaped area would be restored to preconstruction condition or better. Therefore, the impact of the added one square foot impervious surface area should be de minimis.

6.6.3 Available Compensatory Mitigation Measures

Compensatory mitigation was only considered for permanent impacts since temporary impacts would be short term and would be restored to existing conditions after construction. In addition, the project is designed to avoid any construction activities below the OHWM of the West Tributary, within the wetland footprint, or within the top or toe of steep slopes.

6.6.3.1 Permanent Impacts—New Permanent Structures

The project would result in a new Transformer, four EV parking signs, three handholes, two charger stations and five charger station provisions within the toe of slope setback, as well as two EV parking signs, one charger station and one charger station provision within the top of bank setback for Kelsey Creek. Two EV parking signs, two bollards, and EV-1 are outside of any critical areas, buffers, or setbacks. A compensatory mitigation discussion in relation to these is provided below.

1. *Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.*

The project would mostly occur within a capped island surrounded by a paved parking lot. The current condition, nature, or function of the project site would not be significantly changed by the project. Contour and elevation would be restored to existing conditions. New permanent structures would be on a level area previously compacted and geologically stable. New permanent structures would not significantly decrease surface infiltration (see LUC 20.25H.125 Performance Standards – Steep Slopes discussion above). Although the project requires a handhole to be installed in the landscaped area southeast of the vehicle maintenance and operations building, the handhole would only have a footprint of approximately 1 square foot, and the surrounding disturbed landscaped

area would be restored to preconstruction condition or better. The impact of the added one square foot impervious surface area thus should be de minimis.

Impacts on the top of bank setback would be minimized through measures discussed in Section 6.6.2, *Minimization Measures*. The two EV parking signs, one charger station, and one charger station provision would replace pebble groundcover, which has no habitat potential and a higher runoff coefficient than native groundcover; therefore, impacts or the reduced function of the top of bank setback in the project site would be insignificant.

2. *Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.*

Metro would implement best management practices during project operations to ensure continued avoidance of all identified critical areas. In addition, the five provisional electric vehicle charging stations would be constructed over time, which would increase Metro's electric fleet capability, thereby reducing emissions and possibly resulting in a positive effect on climate change.

3. *Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.*

If required by the City of Bellevue, possible compensatory mitigation could include removing invasive species such as reed canary grass along the creek banks and Himalayan blackberry and English ivy along the southern property boundary, though no riparian or wetland vegetation would be affected or degraded from construction or operation of the project. This would improve habitat along the riparian corridor. All proposed available mitigation measures would occur within the critical areas or associated buffers in the project site. No offsite mitigation is proposed.

Per LUC 20.25H.215 mitigation sequencing is required if "an alteration to a critical area is proposed." Construction and operation of the project would be outside of, would not alter, and would have no impact on any critical areas. The project would stay above the OHWM of the West Tributary to Kelsey Creek and outside of the associated wetlands. It would be installed on level terrain beyond any steep slopes. In addition, the project would also avoid top of bank, top of slope, and wetland buffers. Because the project would have no impacts on critical areas, a mitigation or restoration plan or the associated monitoring plan, is not a likely requirement and has not been included as part of this report.

6.6.3.2 Cumulative Gain from Mitigation Measures

Based on avoidance and minimization measures, the new permanent structures from the project would not significantly change or affect the environment or vicinity. The new charging stations would reduce Metro's dependency on gasoline or diesel-powered cars, lowering fleet emissions, and having a positive effect on local air quality and possibly climate change.

Chapter 7

References

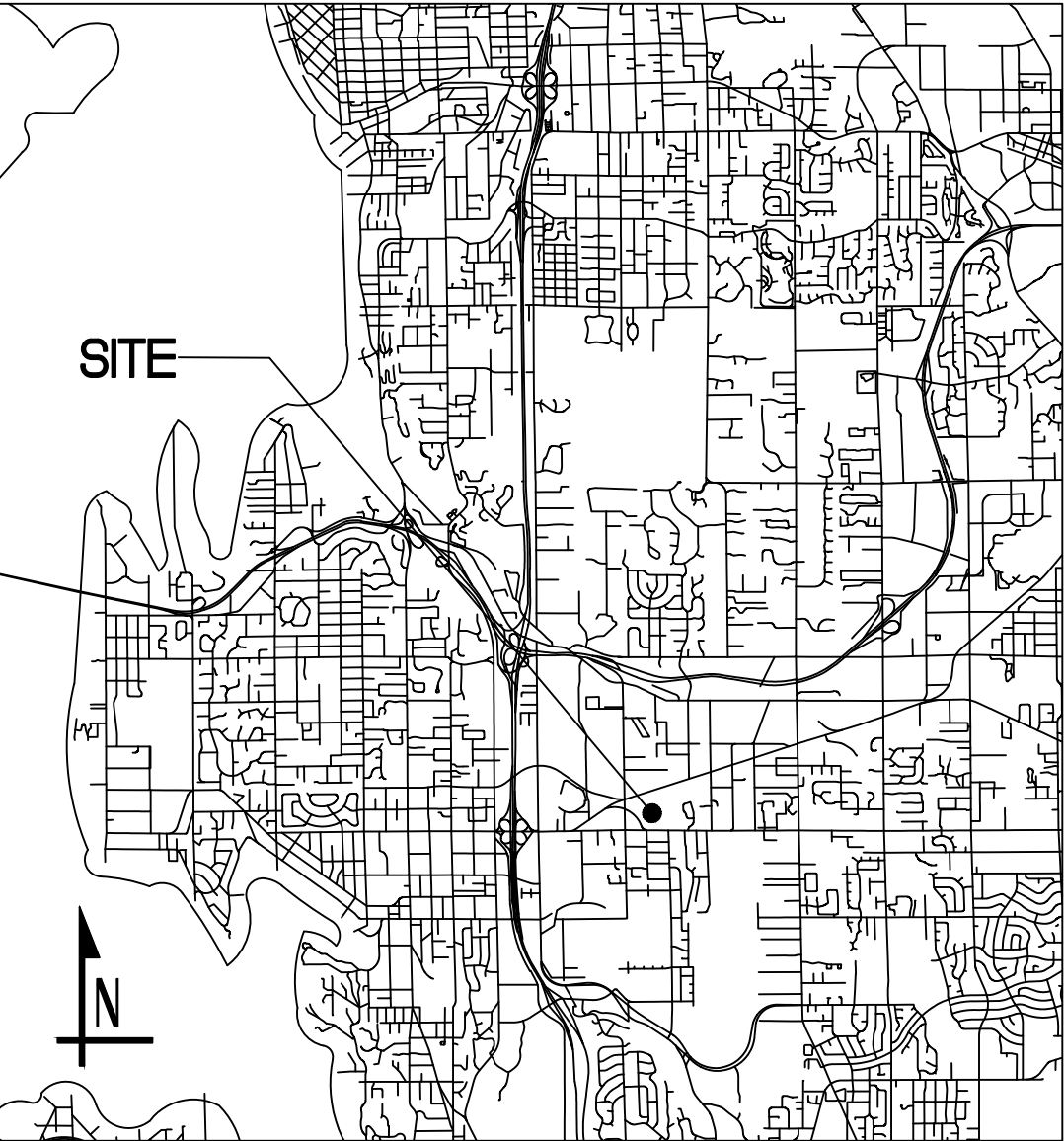
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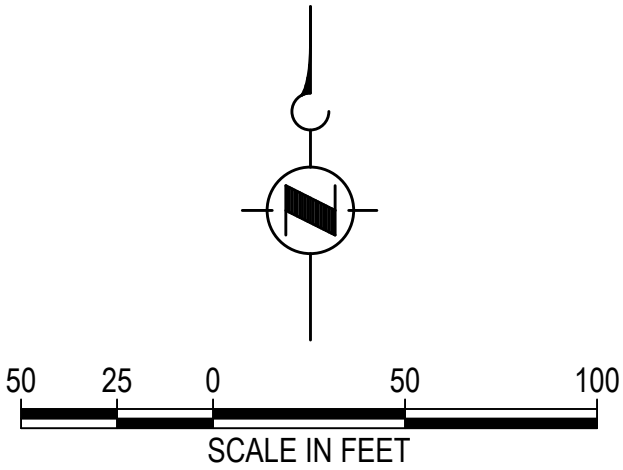
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IMPERVIOUS AREA = 11.47 ACRES
PERVIOUS AREA = 5.00 ACRES



VICINITY MAP

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 2. CRITICAL AREAS PER GPS DATA PREPARED BY ICF, JUNE 2020.

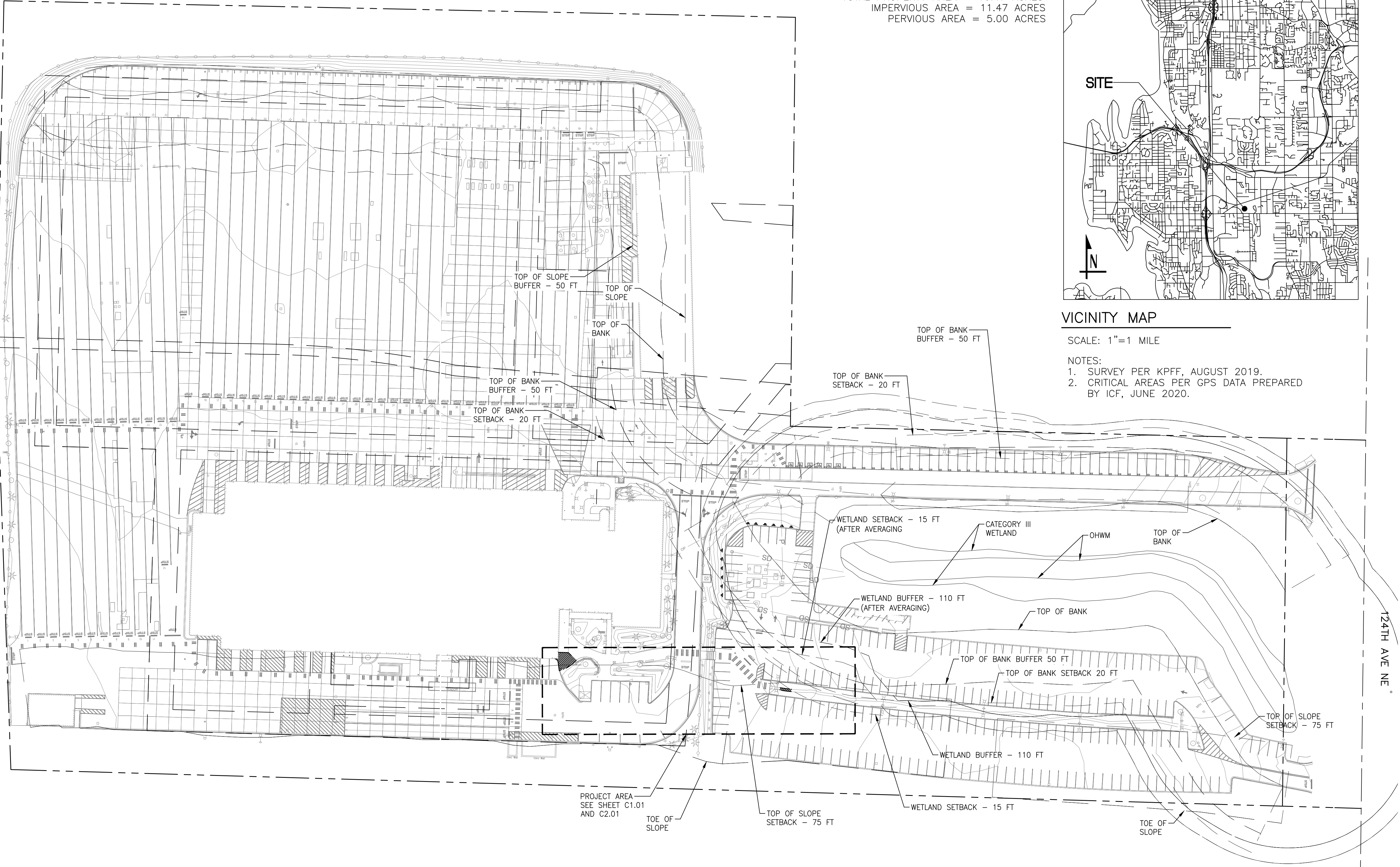


EAST BASE VEHICLE
MAINTENANCE & OPERATIONS
BUILDING

OWNER: KING COUNTY
ADDRESS: 1975 124TH AVENUE NE
BELLEVUE, WA 98005-2113
PARCEL #: 2825059026
LEGAL DESCRIPTION:

THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 28, TOWNSHIP 25 NORTH, RANGE 5 EAST, W. M., IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SUBDIVISION; THENCE NORTH 0°42'15" EAST ALONG THE EAST LINE THEREOF 761.50 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 89°21'05" WEST PARALLEL WITH THE SOUTH LINE OF SAID SUBDIVISION 1286.31 FEET TO THE EAST MARGIN OF 120TH AVENUE NORTHEAST; THENCE NORTH 2°01'39" WEST ALONG SAID MARGIN 389.63 FEET; THENCE NORTH 1°12'00" EAST ALONG SAID MARGIN 342.42 FEET TO A LINE WHICH IS PERPENDICULAR TO THE WEST LINE OF SAID SUBDIVISION AND PASSES THROUGH A POINT NORTH 88°21'06" WEST 1338.50 FEET AND NORTH 1°11'41" EAST (PARALLEL WITH SAID WEST LINE) 731 FEET FROM THE TRUE POINT OF BEGINNING; THENCE SOUTH 88°48'14" EAST ALONG SAID PERPENDICULAR LINE AS MEASURED ALONG THE NORTH LINE THEREOF; THENCE SOUTH 0°42'15" WEST ALONG SAID WEST LINE 389.36 FEET TO THE SOUTH LINE OF THE NORTH 1511.02 FEET OF SAID SUBDIVISION AS MEASURED ALONG THE EAST LINE THEREOF; THENCE SOUTH 88°47'39" EAST ALONG SAID SOUTH LINE 548.00 FEET TO SAID WEST LINE OF SAID SUBDIVISION; THENCE SOUTH 0°42'15" WEST ALONG SAID WEST LINE 350.23 FEET TO THE TRUE POINT OF BEGINNING. SUBJECT TO AN EASEMENT TO THE CITY OF BELLEVUE FOR ROAD PURPOSES OVER THE EAST 30 FEET THEREOF AS RECORDED UNDER AUDITOR'S FILE NO. 6714548 AND SUBJECT TO AND EASEMENT TO THE CITY OF SEATTLE FOR ELECTRICAL LINES OVER THE WEST 45 FEET OF THE EAST 75 FEET THEREOF AS RECORDED UNDER AUDITOR'S FILE NO. 7103160393.



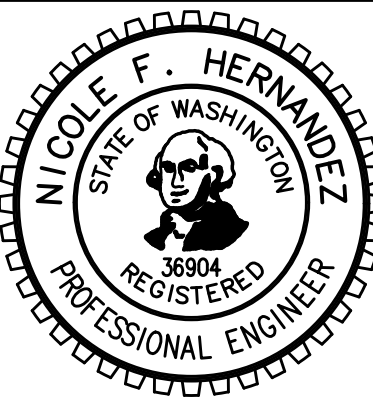
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DRAWN: ERIC WILKINSON	
CHECKED: NICOLE HERNANDEZ	PROJECT NO: -
CHECKED:	CONTRACT NO: -



METRO TRANSIT CAPITAL DIVISION
KING COUNTY - NRV CHARGING
1975 124TH AVE NE, BELLEVUE, WA 98005
SITE PLAN B

DATE: 7/14/2021
DRAWING NO: C1.00
SHEET NO: OF XX